



**Maharashtra Pollution Control Board**  
**महाराष्ट्र प्रदूषण नियंत्रण मंडळ**

**Request for Proposals**  
**for**  
**Supply, Commissioning and Maintenance of Real-Time**  
**Water Quality Monitoring Stations (RTWQMS) In**  
**Maharashtra**

**RFP Reference No:** *MPCB/JD (WPC)/RTWQMS/2024-25*

**Date of Issue:** 10/10/2024

**Tender Fee:** INR 23,600/- (INR Twenty-Three Thousand and Six Hundred only)

**ISSUED BY:**

THE MEMBER SECRETARY,  
MAHARASHTRA POLLUTION CONTROL BOARD,  
KALPATARU POINT, 3<sup>rd</sup> FLOOR, OPP. PVR CINEMA,  
SION CIRCLE, SION,  
MUMBAI-400 022

**Tel:** +91 22 2401 4701 / 2402 4068

**Website:** <https://mpcb.gov.in>

**Email ID:** [jdwater@mpcb.gov.in](mailto:jdwater@mpcb.gov.in)

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## **Disclaimer**

This Request for Proposal (RFP) for the “Supply, Installation, Testing, Training and Commissioning of Real Time Water Quality Monitoring Stations (RTWQMS) in Maharashtra” (hereinafter referred to as “Project”), is issued by Maharashtra Pollution Control Board, GoM (herein referred to as ‘MPCB’).

Whilst the information in this RFP has been prepared in good faith, it is not and does not purport to be comprehensive or to have been independently verified. Neither MPCB, nor any of its officers or employees, nor any of their advisers nor consultants accept any liability or responsibility for the accuracy, reasonableness or completeness of the information contained in the RFP, or for any errors, omissions or misstatements, negligent or otherwise, relating to the proposed RFP or make any representation or warranty, express or implied, with respect to the information contained in this RFP or on which this RFP is based or with respect to any written or oral information made or to be made available to any of the recipients or their professional advisers and, so far as permitted by law and except in the case of fraudulent misrepresentation by the party concerned, and liability therefore is hereby expressly disclaimed.

The information contained in this RFP is selective and is subject to updating, expansion, revision and amendment at the sole discretion of MPCB. It does not purport to contain all the information that a recipient may require for the purposes for deciding for participation in this process. Each Party must conduct its own analysis of the information contained in this RFP, to correct any inaccuracies therein and is advised to carry out its own investigation into the proposed MPCB Project, the regulatory regime which applies thereto and by and all matters pertinent to the MPCB Project and to seek its own professional advice on the legal, financial, and regulatory consequences of entering into any agreement or arrangement relating to the MPCB Project. MPCB shall not be responsible for any direct or indirect loss or damage arising out of or for use of any content of the RFP in any manner whatsoever.

MPCB shall be the sole and final authority with respect to qualifying a bidder through this RFP. The decision of MPCB in selecting the Bidder who qualifies through this RFP shall be final and MPCB reserves the right to reject any or all the bids without assigning any reason thereof. MPCB further reserves the right to negotiate with the Successful Bidder to enhance the value through this project and to create a more amicable environment for the smooth execution of the project.

MPCB may terminate the RFP process at any time without assigning any reason and upon such termination MPCB shall not be responsible for any direct or indirect loss or damage arising out of such a termination.

## Abbreviations

Abbreviation	Description
DSC	Digital Signature Certificate
EMD	Earnest Money Deposit
FY	Financial Year (s)
GCC	General Contract Conditions
GOM	Government of Maharashtra
GST	Goods and Services Tax
MPCB	Maharashtra Pollution Control Board
NDA	Non-Disclosure Agreement
PBG	Performance Bank Guarantee
PDF	Portable Document Format
PKI	Public Key Infrastructure
RFP	Request for Proposal
RTWQMS	Real Time Water Quality Monitoring Stations
SLA	Service Level Agreement
TCS	Tax Collected at Source
TCV	Total Contract Value
TDS	Tax Deducted at Source
TEC	Tender Evaluation Committee

## Key Terms- Definition

Term	Definition
Authority/ Corporation	This means Maharashtra Pollution Control Board (MPCB).
Bid / Proposal	This means the documents in their entirety comprising of the pre- qualification Proposal, Technical and Financial Proposal, clarifications to these, technical presentation/ demo submitted by the Bidder, in response to the RFP, and accepted by MPCB.
Bidder(s)/Agency /Supplier	Business Organization/Firm who shall supply equipments/ machines and services as per scope of work.
Bidder's Representative	The person or the persons appointed by the Bidder from time to time to act on its behalf for overall co-ordination, supervision, and execution of Project.
Business Day	This means any day that is not a Sunday or a public holiday (as declared by Government of Maharashtra).
Certificate of Operation (CoOP)	A written documentation issued by MPCB evidencing the acceptance, approval, or completion, as the case may be, of any Deliverable including any documentation of the Project such that may be required in terms of the Contract
Contract/Agreement	This shall mean the deed to contract, together with its original accompaniment and those latter incorporated in it by mutual consent.
Contract / Project Period	The time period for completion of the entire project scope of work starting from signing of contract till specific duration mentioned defined in the RFP
Contractor/Selected Bidder/Successful Bidder	This shall mean the successful Bidder whose tender has been accepted, and who has been authorized to proceed with the Work mentioned in the REFP.
Day	A period of 24 hours running from midnight to midnight. It means "calendar day" unless otherwise stated. Where, because of a difference in time zone, the calendar day in one country differs from another country then the calendar day shall be deemed to be the calendar day applicable to India.
Deliverables	The services and other documentation, milestones and activities related to complete the Scope of Work for the Project, as defined in the RFP.
EMD/ Bid Security	This refers to the amount to be deposited by the Bidders to MPCB to demonstrate commitment and intention to complete the process of selection of Bidder to complete the bid process in MPCB.
Employer	This shall mean MPCB and is the party who will employ the Successful Bidder to carry out the Works / Delivery of Machinery through contractual engagement.
End of Contract	This refers to the time when the Contract Period has ended.
Financial Year	Shall mean a Financial Year period starting from 01 <sup>st</sup> April and ending on 31 <sup>st</sup> March of the respective year



<b>Term</b>	<b>Definition</b>
Letter of Intent / Letter of Award	This refers to the letter issued by MPCB to the Successful Bidder indicating its selection as the Bidder for implementation of the Project
Non- compliance	Failure / refusal to comply to the terms and conditions of the proposal / Agreement
RFP Portal	The web portal <a href="https://mahatenders.gov.in/">https://mahatenders.gov.in/</a> that is official portal for all details and submissions related to this RFP process
RFP/ Tender	Refers to Request for Proposal containing the technical, functional, commercial, and operational specification and including all clarifications/addendums, explanations and amendments issued by MPCB in respect thereof
Total Contract Value/ Contract Value	Value (Exclusive of all taxes, levies, and duties) finally agreed between MPCB and the Bidder for the delivery of Equipment and Services mentioned in the RFP, which will be the maximum value payable to the Bidder for this Project.

## NOTICE FOR REQUEST FOR PROPOSAL

RFP Ref. No: MPCB/\_\_\_\_\_

Date: - / /2024

Maharashtra Pollution Control Board (MPCB), Government of Maharashtra (GoM) invites sealed tenders from reputed experienced professional organizations for **Supply, Installation, Testing, Training and Commissioning of Real Time Water Quality Monitoring Stations (RTWQMS) in Maharashtra**. MPCB intends to solicit technical (including qualification) and financial bid from prospective Bidders. The prospective firms may download the tender document from website <https://mahatenders.gov.in> on or before date mentioned in the RFP.

For complete details & formats of e-tender can also be obtained from website <https://mahatenders.gov.in> Tender form fee payment of INR 23,600/- (INR Twenty-Three Thousand and Six Hundred only) (inclusive of all taxes and non-refundable) by payment gateway online. No brokers/intermediaries shall be entertained. The MPCB reserves the right to reject any/all applications without assigning any reasons whatsoever.

The complete bidding document shall be published on <https://mahatenders.gov.in> for the purpose of downloading. The downloaded bidding document shall be considered valid for participation in the electronic bidding process (e-Procurement/ e-Tendering) subject to the submission of required tender/ bidding document fee and EMD through e-Tendering Online Payment Gateway mode only.

To participate in online bidding process, Bidders must procure a Digital Signature Certificate (Class - II) as per Information Technology Act-2000 using which they can digitally sign and encrypt their electronic bids. Bidders can procure the same from any CCA approved certifying Agency such as Safecrypt, Ncode, etc. Bidders who already have a valid Digital Signature Certificate (DSC) need not procure a new DSC.

Bidders are also advised to refer “Bidders Manual Kit” available at <https://mahatenders.gov.in> for further details about the e-tendering process.

Bidder is advised to study this RFP document carefully before submitting their proposals in response to the RFP Notice. Submission of a proposal in response to this notice shall be deemed to have been done after careful study and examination of this document with full understanding of its terms, conditions.

The summary of details with regard to this invitation of bids and Tender Schedule are listed in the table below:

S. No.	Items	Description
1.	Name of the Project	Supply, Installation, Testing, Training and Commissioning of Real Time Water Quality Monitoring Stations (RTWQMS) in Maharashtra
2.	Tender Publish	10/10/2024 11.00 IST
3.	RFP Document Download Start / End Date & Time	Start Date: 10/10/2024 11.00 IST End Date: 24/10/2024 17:30 IST Please visit the below mentioned e-Tendering website <a href="https://mahatenders.gov.in">https://mahatenders.gov.in</a>
4.	Last date of submission of Pre- Bid Queries	16/10/2024 18.00 IST
5.	Pre-Bid Meeting	Pre-Bid Meeting 17/10/2024 15:30 IST Pre-Bid meeting to be attended physically as well as virtually. Details for virtual meeting shall be informed later.
6.	Last date of Bid Submission	24/10/2024 17:30 IST
7.	Pre-qualification Bid Opening	25/10/2024 18:00 IST
8.	Financial Bid Opening	Will be declared after Pre-qualification scrutiny.
9.	RFP Reference No.	MPCB/ MPCB/JD (WPC)/ RTWQMS/ 2024-25
10.	Details to be referred for requesting clarifications	All the queries should be received on or before through email only with subject line as follows: <b>“Pre-Bid queries - &lt;Agency’s Name&gt;”.</b>  The queries should be submitted as per the format prescribed in <b>Annexure 18</b>  The Pre-Bid queries to be sent to the Email Id: <a href="mailto:jdwater@mpcb.gov.in">jdwater@mpcb.gov.in</a>
11.	Address	Maharashtra Pollution Control Board, 3 <sup>rd</sup> Floor, Kalpataru Point, Opp. PVR Cinema, Sion Circle, Sion, Mumbai-400 022 Tel: +91 22 2401 4701 / 2402 4068 Email ID: <a href="mailto:jdwater@mpcb.gov.in">jdwater@mpcb.gov.in</a>
12.	Tender Fee to be paid via Online Payment Gateway mode only.	INR 23,600/- (INR Twenty-Three Thousand and Six Hundred only) (inclusive of all taxes and non-refundable)

S. No.	Items	Description
13.	Earnest Money Deposit (EMD) to be paid via Online Payment Gateway mode only	<b>INR 16,00,000 (INR Sixteen Lakhs Only).</b>
14.	Security Deposit / Performance Bank Guarantee (PBG)	10% of the contract value valid up to Three (3) months post end of contract. PBG should be only from Nationalized / Scheduled banks.
15.	Signing of Contract	Within 30 days after Letter of Intent/Letter of Award/Work Order or as intimated by MPCB. If the agreement is not signed within the stated time frame, MPCB shall reserve the right to revoke the offer made, at the discretion of Hon'ble Member Secretary, MPCB.
16.	Bid Validity Period	180 days from the date of opening of Pre-qualification bid. To be extended as per MPCB's instructions.
17.	Contract Period	The total contract period for the project will be three (3) years and (03) three months from the date of LOA/LOI (including warranty period of one (01) year), subject to satisfactory performance. In case required, the selected bidder may extend the maintenance contract with the concerned authority intimated by MPCB.
18.	Method of Selection	Quality cum cost based selection (QCBS)
19.	<p><b>Contact Details</b></p> <p><b>The Member Secretary,</b></p> <p>Maharashtra Pollution Control Board, 3<sup>rd</sup> Floor, Kalpataru Point, Opp. PVR Cinema, Sion Circle, Sion, Mumbai-400 022 <b>Tel:</b> 022-2401 4701 / 2402 4068 <b>Email ID:</b> <a href="mailto:jdwater@mpcb.gov.in">jdwater@mpcb.gov.in</a> <b>Website:</b> <a href="https://MPCB.maharashtra.gov.in/">https://MPCB.maharashtra.gov.in/</a></p>	

**Notes:**

1. Prospective Bidders may visit MPCB Office for any further information/clarification regarding this RFP on prior appointment during working hours till the date of qualification/technical bid submission.
2. All eligible/interested Bidders are required to be enrolled on portal <https://mahatenders.gov.in> before downloading tender documents and participate in e-tendering. Bidders are requested to contact on following telephone numbers for any doubts/information/difficulty regarding online enrolment or obtaining digital certificate M/s. NIC Technologies Ltd. Next Tender (India) Pvt. Ltd. on 020-3018 7500
3. Bidders should submit the documents related to tender online. The bidders must pay the EMD online in advance before the last day of bid submission as mentioned under clause “NOTICE FOR REQUEST FOR PROPOSAL”.
4. Cost of tender form of INR 23,600/- (INR Twenty-Three Thousand and Six Hundred only) (inclusive of all taxes and non-refundable), should be credited in to MPCB by online payment gateway, otherwise Bidders cannot participate in e-tendering.
5. The electronic tendering system for MPCB will be available on separate sub-portal with URL <https://mahatenders.gov.in.as> part of the Electronic Tendering System of Government of Maharashtra which is available on the portal <https://mahatenders.gov.in>.
6. Detailed timetable for the various activities to be performed in e-tendering process by the renderer for quoting their offer is given in above table. Bidder should carefully note down the cut of dates for the carrying out each e-tendering process/activity.
7. Every effort being made to keep the website up to date and running smoothly 24 x 7 by the MPCB and the Bidder. However, MPCB takes no responsibility, and will not be liable for the website being temporarily unavailable due to any technical issue at any point of time.
8. In the event MPCB will not be liable and responsible for any damages or expenses arising from any difficulty, error, imperfection, or inaccuracy with this website, it includes all associate service, or due to such unavailability of the website or any part thereof or any contents or any associate services.
9. The Bidders must follow the timetable of e-tendering process and get their activities of e-tendering process done well in advance so as to avoid any inconvenience due to unforeseen technical problems, if any.
10. MPCB will not be responsible for any incomplete activity of e-tendering process of the renderer due to technical error / failure of website and it cannot be challenged by way of appeal, arbitration and in the court of law.
11. Bidder must get done all the e-tendering activities well in advance.
12. Other instructions can be seen in the tender form. All or any one of the tenders may be rejected by competent authority.

## SECTION 1: LETTER OF INVITATION

### 1.1 Background

Maharashtra Pollution Control Board (MPCB) is implementing various environmental legislations in the state of Maharashtra, mainly including Water (Prevention and Control of Pollution) Act, 1974, Air (Prevention and Control of Pollution) Act, 1981 and some of the provisions under Environmental (Protection) Act, 1986 and the rules framed there under like, Biomedical Waste (M&H) Rules, 1998, Hazardous Waste (M&H) Rules, 2000, Municipal Solid Waste Rules, 2000 etc. MPCB is functioning under the administrative control of Environment Department, Government of Maharashtra.

Some of the important functions of MPCB are:

1. To plan comprehensive program for the prevention, control or abatement of pollution and secure executions thereof
2. To collect and disseminate information relating to pollution and the prevention, control or abatement thereof.
3. To inspect sewage or trade effluent treatment and disposal facilities, and air pollution control systems and to review plans, specification or any other data relating to the treatment plants, disposal systems and air pollution control systems in connection with the consent granted.
4. Supporting and encouraging the developments in the fields of pollution control, waste recycle reuse, eco-friendly practices etc.
5. To educate and guide the entrepreneurs in improving environment by suggesting appropriate pollution control technologies and techniques.
6. Creation of public awareness about the clean and healthy environment and attending the public complaints regarding pollution

### 1.2 Purpose

The Department seeks the services of a reputed, well established and financially sound agency for Supply, Installation, Testing, Training and Commissioning of Real Time Water Quality Monitoring Stations (RTWQMS) in Maharashtra. This initiative aligns with the Board's commitment to ecosystem preservation and air quality improvement.

### 1.3 Contract Period

The total contract period for the project will be three (3) years and (03) three months from the date of LOA/ LOI (including warranty period of one (01) year), subject to satisfactory performance. The contract may be extended for further two (02) years based on the satisfactory performance of the Bidder.

## SECTION 2: INSTRUCTIONS TO BIDDERS

### 2.1 Consortium/ Joint Venture

Consortium / Joint venture is allowed within the scope of this RFP. However, no sub-contracting is allowed within the scope of this RFP.

The Bidder may be a single entity or a group of a maximum of 02 (two) entities (the “Consortium”), coming together to implement the Project. However, no Bidder applying individually or as a member of a Consortium, as the case may be, can be member of another bidding Consortium for the Project. In the event of such an occurrence (i.e., if the Bidder is part of Consortium of more than 01 (one) Bid), all such Bids, shall be summarily rejected. The term ‘Bidder’ used herein would apply to both a single entity and a Consortium.

- a) The maximum number of members that shall be allowed to form a Consortium for the purpose of this RFP must not exceed 02 (two). In the event of such an occurrence (i.e., if the Consortium members are more than 02 (two), the Proposal, shall be summarily rejected; The Lead Member in case of consortium shall be the Agency who is supplying RTWQMS and in case of single bidder, it shall be who is supplying RTWQMS.
- b) The Proposal should include a description of the roles and responsibilities of individual Members of the Consortium, particularly with reference to technical, financial, operational and Warranty Services obligations. The Proposal should contain the required information for each Member of the Consortium.
- c) All members should fulfil eligibility criterion pertaining to their area of competence and one of them would be considered as Lead Bidder as decided by them through a Joint Bidding Agreement, to whom the Project would be given for execution and the Lead Bidder would be responsible for execution of the complete Project and comply with all terms and conditions of RFP. The Members of the Consortium shall nominate one Member as the lead member (the “Lead member”), which must be an entity registered/ incorporated in India (as on the date of submission of Proposal) and shall have the highest share in the Consortium. The Lead Member of the Consortium shall hold equity shareholding of at least 51% (fifty one percent) of the paid up and subscribed equity of the Consortium for the entire duration of the Project. The nomination(s) shall be supported by a power of attorney, substantially in the form specified at **Annexure 23** executed on non-judicial stamp paper of appropriate value and duly notarized by a notary public, signed by all the other Members of the Consortium;
- d) The role and responsibility of any member must be commensurate with the technical/financial capabilities that such member is contributing towards meeting the qualification criteria. Each consortium member is liable to contribute resources in terms of knowledge, skills, and trained manpower commensurate with its role and responsibilities during the Agreement Period;
- e) The Consortium members on whose strength a Bidder has been short-listed should have a substantial stake in the Project. The Consortium member, other than the Lead Member of the Consortium; whose technical and/or financial capacity is considered for the purpose of

qualification and shortlisting herein; should hold at least 26% (twenty-six percent) of the paid up and subscribed equity in the Consortium for the entire duration of the Project;

- i. The Members of the Consortium shall enter into a binding joint bidding agreement, substantially in the form specified at **Annexure 22** (the “Joint Bidding Agreement”), for the purpose of submitting a Proposal. The Joint Bidding Agreement, to be submitted along with the Proposal, shall, inter alia:
- ii. Head and Branch offices (if responsible for work under the contract) (provide mailing addresses, phone, fax and email);
- iii. Date, form and state of incorporation of Consortium member; Company Principals (Name, title and business address)
- iv. Convey the details of shareholding/ ownership equity commitment(s) of the Members of the Consortium, which would enter into the Contract with MPCB and subsequently perform all the obligations of the Successful Bidder in terms of the Contract, in case the Project is awarded to the Consortium in accordance with this RFP; and,
- v. Clearly outline the proposed roles and responsibilities, if any, of each Member; and,
- vi. Commit the minimum equity stake to be held by each Member; and
- vii. Undertake that the Lead member of the Consortium shall hold equity shareholding of at least 51% (fifty one percent) of the paid up and subscribed equity of the Consortium for the entire duration of the Project; and
- viii. Undertake that the Consortium member, other than the Lead member of the Consortium; whose technical and/or financial capacity is considered for the purpose of qualification and shortlisting herein; should hold at least 26% (twenty-six percent) of the paid up and subscribed equity in the Consortium for the entire duration of the Project; and
- ix. Include a statement to the effect that all Members of the Consortium shall be liable jointly and severally for all obligations in relation to the Project for the entire Contract Period or such extended term as may be mutually agreed; and
- x. Except as provided under this RFP and the Bidding Documents, there shall not be any amendment to the Joint Bidding Agreement without the prior written consent of MPCB

## 2.2 Completeness of Response

1. Bidders are advised to study all instructions, forms, terms, requirements, and other information in the RFP documents carefully. Submission of bid shall be deemed to have been done after careful study and examination of the RFP document with full understanding of its implications.
2. The response to this RFP should be full and complete in all respects. Failure to furnish all information required by the RFP document or submission of a proposal not substantially responsive to the RFP document in every respect will be at the Bidder's risk and may result in rejection of its Proposal forfeiture of the EMD.

## 2.3 Proposal Preparation Costs

1. The bidder shall submit the bid at its own cost and MPCB shall not be held responsible for any cost incurred by the bidder. Submission of a bid does not entitle the bidder to claim any cost and



rights over MPCB and MPCB shall be at liberty to cancel any or all bids without giving any notice.

2. All materials submitted by the bidder shall be the absolute property of MPCB and no copyright/patent etc. shall be entertained by MPCB.

## 2.4 Bidder Inquiries

Bidder shall e-mail their queries at above mentioned e-mail address, in the Excel format as mentioned in the **Annexure 18**. The response to the queries will be published on <https://mahatenders.gov.in>. No queries will be entertained thereafter. The response of MPCB shall become integral part of RFP document. MPCB shall not make any warranty as to the accuracy and completeness of responses

## 2.5 Amendment of RFP Document

1. All the amendments made in the document would be published on the e-Tendering Portal (<https://mahatenders.gov.in>) and shall be part of RFP.
2. The Bidders are advised to visit the aforementioned website/ portal on regular basis to check for necessary updates. The MPCB also reserves the right to amend the dates mentioned in this RFP.

## 2.6 Supplementary Information to the RFP

If MPCB deems it appropriate to revise any part of this RFP or to issue additional data to clarify an interpretation of provisions of this RFP, it may issue supplements to this RFP. Any such corrigendum shall be deemed to be incorporated by this reference into this RFP and shall become part of this RFP.

## 2.7 MPCB's right to terminate the process

MPCB may terminate the RFP process at any time before the award of contract without assigning any reason. MPCB reserves the right to amend/edit/add/delete any clause of this Bid Document. This will be informed to all and will become part of the bid/RFP and information for the same would be published on the e-Tendering portal.

## 2.8 MPCB's Right to accept any Bid and to reject any or All Bids

MPCB reserves the right to accept or reject any Bid, and to annul the bidding process and reject any or all Bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for MPCB's action.

## 2.9 Earnest Money Deposit (EMD)

1. Bidders are required to submit an Earnest Money deposit (EMD) online for an amount mentioned under the clause “NOTICE FOR REQUEST FOR PROPOSAL” through Online e-Tendering Payment Gateway mode only.
2. Unsuccessful bidder’s EMD will be returned **within 30 days** from the date of finalization of the contract / tender.
3. No interest will be paid by MPCB on the EMD amount and EMD will be refunded to all Bidders (including the successful Bidder) without any accrued interest on it.
4. The Bid submitted without EMD, mentioned above, will be summarily rejected.
5. The EMD may be forfeited:
  - If a Bidder withdraws his bid or increases his quoted prices during the period of bid validity or its extended period, if any.
  - In case of a successful bidder, if the Bidder fails to sign the contract in accordance with the terms and conditions.
  - If during the bid process, a bidder indulges in any such deliberate act as would jeopardise or unnecessarily delay the process of bid evaluation and finalisation.
  - If, during the bid process, any information is found false/fraudulent/malafide, and then MPCB shall reject the bid and, if necessary, initiate action.
  - The decision of the MPCB regarding forfeiture of the EMD shall be final and binding upon bidders.

## 2.10 Authentication of Bid

1. The Proposal shall be submitted through Maha-Tender Website <https://mahatenders.gov.in>. The procedure for filing of e-tender is provided on the portal. For any queries or errors faced related to uploading and submission of Qualifying Technical and Financial proposals, payment of Tender Fee and EMD, as part of this RFP, the Bidder(s) may contact the e-portal’s 24 x 7 helpdesk at toll free number as mentioned on the Maha-Tender Website. The Bidder(s) may kindly note that MPCB shall not be responsible for any delays or errors faced in submission of Proposals, processing payment of Tender fees or EMD etc., at any stage of the Proposal submission process due to issues including but not limited to network outage and connectivity, technical errors, server downtime etc. on <https://mahatenders.gov.in>.
2. The Authorized person of the bidder who signs the bid shall obtain the authority letter from the bidder, which shall be submitted with the Bid. Bid shall be submitted on official letter head of company. All pages of the bid and its annexures, etc. shall be signed and stamped by the person or persons signing the bid.
3. Notarised / irrevocable Power of Attorney executed by the Bidder in favour of the duly authorised representative, certifying him as an authorised signatory for the purpose of this bid. In the case of the Board resolution authorizing a person as the person responsible for the bid, the Board resolution shall be submitted.

## 2.11 Language of Bids

This bid should be submitted in English language only. If any supporting documents submitted are in any language other than English, then the translation of the same in English language is to be duly attested by the bidder and submitted with the bid, and English translation shall be validated at MPCB's discretion.

## 2.12 Patent Claim

In the event of any claim asserted by a third party of infringement of copyright, patent, trademark, or industrial design rights arising from the use of the goods/services or any part thereof, the bidder shall expeditiously extinguish such claim. If the bidder fails to comply and MPCB is required to pay compensation to a third party resulting from such infringement, the bidder shall be responsible for such compensation, including all expenses, court costs, lawyer fees etc. MPCB shall give notice to the successful bidder of any such claim and recover it from the bidder.

## 2.13 Bid Submission Format

The entire proposal shall be submitted strictly as per the format specified in this Request for Proposal. Bids with deviation from this format are liable for rejection.

## 2.14 Preparation of Proposal

1. Bidders are requested to submit their Proposal in English language and strictly in the formats provided in this RFP. MPCB will evaluate only those Proposals that are received in the specified forms and complete in all respects
2. In preparing their Proposal, Bidders are expected to thoroughly examine the RFP
3. The Technical Proposal submitted by the Bidder should provide the documents as prescribed in this RFP ("Technical Proposal"). No information related to Financial Proposal should be provided in the Technical Proposal. In such a case, MPCB will be entitled to reject the Proposal
4. Any condition or qualification or any other stipulation contained in the Proposal submitted by the Bidder shall render the Proposal liable to rejection as a non-responsive Bid
5. Non-compliance with the instructions and conditions contained in the RFP/ Addendum(a)/ Corrigendum(a) shall render the Proposal liable to be rejected. MPCB reserves the right to further debar/ blacklist the Bidder in consequence of non-compliance of any condition of the RFP/Corrigendum(a)/Addendum(a) that impacts the Selection Process in any manner
6. The Proposals must be digitally signed by the Authorized Representative on each page of the Technical Proposal being submitted (the "Authorized Representative") as detailed below:
  - a. by a partner, in case of a limited liability partnership/ Partnership under 1932 Act; or
  - b. by a duly authorized person, in case of a private and public limited company or a corporation
  - c. In case of a Consortium, the proposal shall be signed by the duly authorized signatory of the Lead Member and shall be legally binding on all the Members of the Consortium

7. Bidders should note the Proposal Due Date, as specified in Notice of Request for Proposal, for submission of Proposals. Except as specifically provided in this RFP, no supplementary material will be entertained by MPCB, and the evaluation will be carried out only on the basis of documents received by the closing time of Proposal Due Date as specified in notice of RFP. Bidders will ordinarily not be asked to provide additional material information or documents subsequent to the date of submission, and unsolicited material, if submitted, will be summarily rejected. For the avoidance of doubt, MPCB reserves the right to seek clarifications in case the Proposal is non-responsive on any aspects.
8. **Financial Proposal:** While preparing the Financial Proposal, Bidders are expected to consider the various requirements and conditions stipulated in this RFP document. The Financial Proposal should be submitted as per the standard Financial Proposal submission forms prescribed in this RFP
9. While submitting the Financial Proposal, the Bidder shall ensure the following:
  - a) The Bidder shall submit the Financial Proposal as per the instruction provided in this RFP
  - b) The Bidder shall ensure not to submit the Financial Proposal with the Technical Proposal. Any Technical Proposal with financial details will be rejected by MPCB
  - c) The Financial Proposal shall only be submitted in soft copy through Maha Tender Website <https://mahatenders.gov.in>, in the Format as provided therein (“Financial Proposal”) in a MS excel file clearly indicating the amount in both figures and words and up to 02 (two) decimal points. For example, amount shall be quoted as 10.12 instead of 10 or 10.1
  - d) In case of any discrepancy between figures and words, in the Financial Proposal, the amount indicated in words shall prevail
  - e) The Financial Proposal shall be furnished in INR (Indian Rupees) only
  - f) The Financial Proposal needs to be filled in completeness based on financial submission sheet and as per the details mentioned within the sheet
  - g) The Financial Proposal should be a Proposal inclusive of all the costs including but not limited to all taxes associated with the Project. The Financial Proposal should clearly indicate the price to be charged without any qualifications whatsoever and should include all taxes, duties, fees, levies, works contract tax, and other charges as may be applicable in relation to the activities proposed to be carried out. These shall also cover manpower remuneration their statutory contributions, travel, lodging and boarding cost, cost of training of the staff deployed for operations of the vehicles, printing of instruction manual etc. The Financial Proposal shall consider all the expenses and tax liabilities and cost of insurance, levies, and other impositions applicable under the prevailing law except GST.
  - h) If there is a change in the applicable taxes, MPCB shall bear the cost of the same
  - i) Rates quoted in the Financial Proposal must be firm and final and shall not be subject to any modifications, on any account whatsoever
  - j) The total amount indicated in the Financial Proposal shall be without any condition attached or subject to any assumption and shall be final and binding. In case any assumption or condition is indicated in the Financial Proposal, it shall be considered non-responsive and would be liable to be rejected

- k) NIL value quoted against any field in the Financial Proposal sheet shall lead to rejection of Proposal
- l) Bidders are required to note that they should necessarily submit their Financial Proposal in the format provided and no other format is acceptable. If during or subsequent to evaluation of Financial Proposal, it is discovered that the Financial Proposal submitted by a Bidder, has been modified in any unauthorized manner, the Proposal may be rejected. MPCB may first in exercise of its discretion seek clarifications from the Bidder on such an occurrence

## 2.15 Bid Submission Instructions

Complete bidding process will be online (e-Tendering) in Two stages. Submission of bids shall be in accordance with the instructions given in the Table below:

Stages	Particulars	Instructions
Stage 1	<b>Tender Fee &amp; EMD</b>	Tender Fees and Earnest Money Deposit (EMD) must be uploaded through online bid submission process.
	<b>Pre-qualification Proposal</b>	The pre-qualification proposal shall be prepared in accordance with the requirements specified in this RFP and the formats prescribed in the RFP. Each page of the pre-qualification proposal should be signed and stamped by the authorized signatory of the bidder. Pre-qualification proposal should be submitted through online e-tendering website only. Pre-Qualification Proposal shall comprise of following: <ul style="list-style-type: none"> <li>a. Checklist for Pre-Qualification Proposal</li> <li>b. Pre-Qualification documents</li> <li>c. Bidder and Bidding Firm Details</li> </ul>
Stage 2	<b>Financial Proposal</b>	The financial proposal shall be prepared in accordance with the requirements specified in this RFP and in the formats prescribed in the RFP. Each page of the financial proposal should be signed and stamped by the authorized signatory of the bidder. Financial proposal should be submitted through online e-tendering website only. In no way the bidder shall indicate its Financial Offer in <b>Financial Proposal</b> only. In case it is found, MPCB shall summarily reject the proposal of the said bidder.

The following points shall be kept in mind for submission of bids:

1. MPCB shall not accept delivery of proposal in any manner other than that specified in this RFP. Proposal delivered in any other manner shall be treated as defective, invalid, and rejected.

2. The Bidder is expected to price all the items and services sought in the RFP and proposed in the proposal. The Bid should be comprehensive and inclusive of all the services to be provided by the Bidder as per the scope of his work and must cover the entire Contract Period.
3. MPCB may seek clarifications from the Bidder on the Qualifying Technical proposal. Any of the clarifications by the Bidder on the Qualifying Technical proposal should not have any commercial implications. The Financial proposal submitted by the Bidder should be inclusive of all the items in the Qualifying technical proposal and should incorporate all the clarifications provided by the Bidder on the Qualifying Technical proposal during the evaluation of the Qualifying technical offer.
4. Financial Proposal shall not contain any technical information. Similarly, Qualifying technical proposal with any financial cost related information shall be summarily rejected and the bidder shall be disqualified from the tender process.
5. It is required that the all the proposals submitted in response to this RFP should be unconditional in all respects, failing which MPCB reserves the right to reject the proposal.
6. Proposals sent by fax/post/courier shall be rejected.
7. It shall be the sole responsibility of the bidder to ensure that all the documents required for the Eligibility criteria and the Technical Evaluation of the bid are uploaded on the portal well within time and MPCB shall not entertain any re- presentation from any bidder, who fails to upload the requisite documents within the stipulated time and date on account of any technical issues related to low internet connectivity, size of the files to be uploaded etc. Therefore, the bidders are notified that they must read the instructions / information given on the homepage of the e-tender portal and must understand all the nuances of technology in advance.

## **2.16 Late Proposal and Proposal Validity Period**

Proposals received after the due date and the specified time (including the extended period if any) for any reason whatsoever, shall not be entertained and shall not be opened in the e-Tendering system. The validity of the proposals submitted before deadline shall be valid till One Hundred Eighty (180) days from the date of opening of **Stage 1** bid.

## **2.17 Modification and Withdrawal of Proposals**

No Proposal shall be withdrawn in the interval between the deadline for submission of proposals and the expiration of the validity period specified by the Bidder on the Proposal form. Entire EMD shall be forfeited if any of the Bidders withdraw their proposal during the validity period.

## **2.18 Non-conforming Proposals**

A Proposal may be construed as a non-conforming proposal and ineligible for consideration:

1. If it does not comply with the requirements of this RFP.
2. If the Proposal does not follow the format requested in this RFP or does not appear to address the requirements of the MPCB.

## 2.19 Acknowledgement of Understanding of Terms

By submitting a Proposal, each Bidder shall be deemed to acknowledge that he/she has carefully read and accepts all sections of this RFP, including all forms, schedules, annexure, corrigendum, and addendums (if any) hereto, and has fully informed itself as to all existing conditions and limitations.

## 2.20 Bid Opening

1. Total transparency shall be observed and ensured while opening the Proposals/Bids. All Bids shall be opened in the presence of Bidder's representatives who choose to attend the Bid opening sessions on the specified date, time, and address.
2. MPCB reserves rights at all times to postpone or cancel a scheduled Bid opening.
3. Bid opening shall be conducted in **Two stages**.
  - a. In **the first stage**, Tender fee, EMD, Pre-Qualification proposals along with document checklist shall be opened and evaluated as per the criteria mentioned in the RFP.
  - b. In **the second stage**, Financial Proposal of only those Bidders, whose all pre-proposals (Prequalification) qualify, shall be opened.
4. All Bids shall be opened in the presence of Bidder's representatives who choose to attend the Bid opening sessions on the specified date, time, and address.
5. All Bids shall be opened in the presence of Bidder's representatives who choose to attend the Bid opening sessions on the specified date, time, and address.
6. The Bidder's representatives who are present shall sign a register evidencing their attendance. In the event of the specified date of Bid opening being declared a holiday for MPCB, the bids shall be opened at the same time and location on the next working day. In addition to that, if the representative of the Bidder remains absent, MPCB will continue process and open the bids of all bidders.
7. During Bid opening, preliminary scrutiny of the Bid documents shall be made to determine whether they are complete, whether required Bid Security has been furnished, whether the Documents have been properly signed, and whether the bids are generally in order. Bids not conforming to such preliminary requirements shall be prima facie rejected. MPCB has the right to reject the bid after due diligence is done.

## 2.21 Failure to agree with the Terms & Conditions of the RFP / Contract

Failure of the successful Bidder to agree with the Terms & Conditions of the RFP / Contract shall constitute enough grounds for the annulment of the award and forfeiture of security deposit, in which event MPCB may invite the next best bidder for negotiations or may call for fresh RFP.

## 2.22 Non-Disclosure Agreement (NDA)

The Successful Bidder has to sign the Non- Disclosure Agreement as per **Annexure 20** with MPCB.

## 2.23 Security Deposit / Performance Bank Guarantee

1. Security Deposit / Performance Bank Guarantee is governed for services as follows:
  - a. The bidder shall carry out the services in conformity with the requirements of the RFP, generally accepted professional and technically accepted norms relevant to such projects and to the satisfaction of MPCB.
  - b. The Earnest Money deposited at the time of bid submission would be given back to the Successful Bidders after completion of agency onboarding process.
2. The Successful Bidder shall deposit the Performance Bank Guarantee / Security as follows:
  - a. The Successful Bidder shall at his own expense, deposit with MPCB, and Performance Bank Guarantee from a Nationalised / Scheduled Commercial Bank, of stated value and valid for Three (3) months after end of the respective project.
  - b. The Performance Bank Guarantee should be furnished within Seven (7) Working Days from the date of issue of Letter of Intent / Award OR Work Order OR Contract to the successful bidder.
  - c. The Performance Bank Guarantee may be discharged/returned by MPCB upon being satisfied that there has been due performance of the obligations of the successful bidder under the contract. However, no interest shall be payable on the Performance Bank Guarantee.
3. MPCB shall also be entitled to make recoveries from the Performance Bank Guarantee on the following grounds:
  - a. Any amount imposed as a fine by MPCB for irregularities Committed by the selected bidder for the respective project assignment.
  - b. Any amount which MPCB becomes liable to the Government /Third party on behalf of any default of the selected bidder or any of his/her/their agent/ employees or staff.
  - c. Any payment/fine made under the order/judgment of any court/consumer forum or law enforcing agency or any person working on his behalf.
  - d. Any other outstanding amount.
4. Once the amount under this clause is debited, the selected bidder shall reimburse the Performance Bank Guarantee to the extent the amount is debited within 15 days of such debit by MPCB failing which it will be treated as breach of agreement and may lead to termination of agreement with forfeiture of all amounts including interest free Performance Bank Guarantee in favour of MPCB.

## 2.24 Bid Prices

The bidder has to quote for “Selection of an Agency for Supply, Commissioning, operation and Maintenance and CAMC of 30 Nos. of 1.5 TPD Capacity In-Vessel Solarized Mechanical Composting Machines Integrated into a Vehicles for MPCB” in the format given for financial bid. Validity of Bid shall be of 180 days (One Hundred and Eighty Days) from date of opening of Technical / Stage 1 bids.



## **2.25 Bid Currency**

The rates quoted shall be in Indian Rupees only.

## **2.26 Correction of errors**

The bidder is advised to take adequate care in quoting the rate. No excuse for corrections in the quoted rate will be entertained afterwards. The corrections or overwriting in bid document shall lead to cancellation of Bid.

## **2.27 Corrections to Arithmetic errors**

In case of discrepancy between the amounts mentioned in figures and in words, the amount in words shall govern. The amount stated in the Bid form, adjusted in accordance with the above procedure, shall be considered as binding.

## **2.28 Disqualification**

The Bid from the bidders is liable to be disqualified in the following cases:

1. Bid not submitted in accordance with the bid document.
2. The bidder submits conditional offer.
3. Bid is received in incomplete form.
4. Bid is received after due date and time.
5. Bid is not accompanied by all requisite supporting documents.
6. Bidder enclosing Financial Bid in Technical Bid.
7. The successful bidder fails to enter into a contract within period specified by MPCB of the date of notice of award of contract or within such extended period, as fixed by MPCB.
8. Awardee of the contract has given the letter of acceptance of the contract with his conditions.
9. Non - fulfilling of any condition / term by bidder.

## **2.29 Tendering Under Different Names**

1. Firms with common proprietor/partner or connected with one another either financially or as principal and agent or as master and servant or with proprietor/partners closely related to each as husband, wife, father, mother and minor son/daughter and brother/sister and minor brother/sister, shall not tender separately under different names for the same Contract.
2. If it is found that firms as described in point number 1 above have tendered separately under different names for the same Contract, all such tender(s) shall stand rejected and tender deposit of each such firm /establishment shall be forfeited. In addition, such firms / establishments shall

be liable, at the direction of the Member Secretary, MPCB, for further penal action including blacklisting.

3. If it is found that clearly related persons as in above have submitted separate tender/quotations under different names of firms/establishments but with common address for each establishment/firm, though they have different addresses, are managed, or governed by the same person/persons jointly or severally, such Bidders shall be liable for action as in para above.
4. If after the award of Contract, it is found that the accepted tender violated for cancellation at any time during its currency in addition to penal action against the contractors as well as related firms / establishments.

## SECTION 3: PRE-QUALIFICATION CRITERIA AND TECHNICAL EVALUATION

### 3.1 Pre-Qualification Criteria

S. No.	Minimum Eligibility Criteria-Pre-Qualification Criteria	Document to be submitted
<b>PQ 1</b>	<p>The bidder should be “A Company registered in India under the Companies Act 1956 or 2013 or a partnership firm under the Indian Partnership Act, 1932 or the Limited Liability Partnerships Act, 2008, (as amended from time to time)</p> <p>A Consortium comprising of a maximum of 02 (two) entities as mentioned above is allowed to participate in the Selection Process. In case more than 02 (two) entities participate in the Selection Process as a Consortium, then all such bid, shall be summarily rejected.</p>	<ul style="list-style-type: none"> <li>• Copy of Certificate of Incorporation / Partnership deed</li> <li>• Copy of valid PAN Card</li> <li>• Copy of valid GST Certificate with GST Number</li> <li>• Copy of Power of Attorney signed by legally authorized signatories as per <b>Annexure 17</b>.</li> </ul> <p>(In case of sole Bidder, it should be met by sole Bidder itself whereas in case of Consortium, this would be applicable for each of the Consortium members)</p>
<b>PQ 2</b>	<p><b>Average Annual Turnover:</b></p> <p>Minimum Average Annual Turnover (MAAT) for the last three (03) audited financial years (FY 2021-22, FY 2022-23 &amp; FY 2023-24) of the bidder should not be less than <b>INR 2.5 Crore (INR Three Crore only)</b></p>	<p>Copy of Annual Audited Financial Statements, Balance sheet and profit and loss statement, certified by a Chartered Accountant for the preceding Three years (FY 2021-22, FY 2022-23 &amp; FY 2023-24)</p> <p><b>Note: Audited financial statement should match with certificate of chartered accountant</b></p> <p><b>Certificate from Statutory Auditor as per Annexure 5.</b></p> <p>(In case of sole Bidder, it should be met by the sole Bidder itself. Whereas in case of Consortium, either of the Consortium member should fulfil the relevant criterion)</p>
<b>PQ 3</b>	<p><b>Net-worth Criteria:</b></p>	<p>Duly filled Format for Financial years (FY 2021-22, FY 2022-23 &amp; FY 2023-</p>

S. No.	Minimum Eligibility Criteria-Pre-Qualification Criteria	Document to be submitted
	<p>The bidder should have a positive net worth for each of the last three audited financial years (FY 2021-22, FY 2022-23 &amp; FY 2023-24)</p> <p>[Net Worth as defined in Companies Act 1956 / 2013 as amended from time to time.]</p>	<p>24) to be submitted on the letterhead of the Chartered Accountant</p> <p>Net worth Certificate duly certified by Chartered Accountant.</p> <p><b>Certificate from Statutory Auditor as per Annexure 5</b> (In case of sole Bidder, it should be met by sole Bidder itself whereas in case of Consortium, this would be applicable for each of the Consortium Members)</p>
<p><b>PQ 4</b></p>	<p><b>Project Experience 1:</b></p> <p>The Bidder must have experience in similar works with any State Government / Central Government / PSU / Union Territory (UT) / Urban Local Body (ULB)/ Govt in India/ large scale industries in past seven (07) years as on date of submission of bid per following details:</p> <ul style="list-style-type: none"> <li>- One (01) project worth <b>INR 6.5 Crore</b> (Six Crore Fifty Lakhs and above) OR</li> <li>- Two (02) projects worth <b>INR 4.0 Crore</b> (Four Crore and above) OR</li> <li>- Three projects worth <b>INR 3.20 Crore</b> (Three Crore twenty Lakhs) and above</li> </ul>	<ul style="list-style-type: none"> <li>a. Bidders shall submit copy of Purchase Order (PO)/ Work Order (WO)/ Letter of Award (LOA) / Contract Agreement mentioning the relevant scope of Work.</li> <li>b. <b>Completion Certificate</b> from the client OR In case of on-going project, partial completion certificate from the client on client's letter head mentioning the relevant scope of Work, having received the payment matching the 'Minimum Project Value' of the partially completed project.</li> <li>c. <b>Proof of payment</b> for private companies work orders.</li> </ul> <p><b>Bidder to provide Project Citation as per Format in Annexure 4.</b> (In case of sole Bidder, it should be met by the sole Bidder itself, whereas in case of Consortium, either of the Consortium member should fulfil the relevant criterion individually or jointly)</p>

S. No.	Minimum Eligibility Criteria-Pre-Qualification Criteria	Document to be submitted
<p><b>PQ 5</b></p>	<p><b>Project Experience 2:</b> The Bidder should have experience of successful installation of at least Thirty (30) nos. of RTWQMS during the past Seven (07) years in any <b>**large-scale industries.</b></p>	<p>a) Bidders shall submit copy of work order/ contract agreement mentioning the relevant scope of Work. b) Completion Certificate from the client c) Project Citation as per format specified in <b>Annexure 4.</b> d) Declaration for having experience <b>Annexure 8.</b> <b>*Only Completed projects shall be considered</b> (In case of sole Bidder, it should be met by the sole Bidder itself, whereas in case of Consortium, either of the Consortium member should fulfil the relevant criterion individually or jointly)</p>
<p><b>PQ 6</b></p>	<p><b>Project Experience 3:</b> The Bidder should have experience of “similar works” * of supplying at least Five (05) nos. of river RTWQMS along with Operation &amp; Maintenance during the past Seven (07) years.</p>	<p>a. Bidders shall submit copy of Purchase Order (PO)/ Work Order (WO)/ Letter of Award (LOA) / Contract Agreement mentioning the relevant scope of Work. b. Completion Certificate from the client OR In case of on-going project, partial completion certificate from the client on client’s letter head mentioning the relevant scope of Work, having received the payment matching the ‘Minimum Project Value’ of the partially completed project. <b>Bidder to provide Project Citation as per Format in Annexure 4.</b> (In case of sole Bidder, it should be met by the sole Bidder itself, whereas in case of Consortium, either of the Consortium member should fulfil the</p>

S. No.	Minimum Eligibility Criteria-Pre-Qualification Criteria	Document to be submitted
		relevant criterion individually or jointly)
<b>PQ 7</b>	<p><b>Manpower Strength</b> The Bidder should have at least <b>Twenty (20)</b> Service Engineers experienced in Comprehensive O &amp; M of RTWQMS, with either permanent PF account or professional tax account on bidder's payroll as on bid submission date.</p>	<ul style="list-style-type: none"> <li>▪ Attested copy of the Employee Provident Fund registration letter / certificate.</li> <li>▪ Attested copy of the Labour License under the Contract Labour (Regulation &amp; Abolition) Act.</li> <li>▪ Attested copy of the Employee State Insurance registration letter / certificate.</li> <li>▪ Bidder should provide above copies duly signed and stamped, along with the HR declaration provided in <b>Annexure 11</b>.</li> </ul> <p>(In case of sole Bidder, it should be met by the sole Bidder itself, whereas in case of Consortium, either of the Consortium member should fulfil the relevant criterion individually or jointly)</p>
<b>PQ 8</b>	<p><b>Certifications:</b> OEM / authorized bidder of OEM should have</p> <ul style="list-style-type: none"> <li>▪ valid ISO 9001: 2015 certification, and</li> <li>▪ valid certificate from ICAT/ ARAI / CIRT or equivalent government agency and Type Approval/ /Homologation Certification (for machine)</li> <li>▪ TUV certification for Sensors</li> </ul>	<p>Copy of valid Certificate as of the date of bid submission.</p> <p>(In case of sole Bidder, it should be met by the sole Bidder itself, whereas in case of Consortium, either of the Consortium member should fulfil the relevant criterion individually or jointly)</p>
<b>PQ 9</b>	<p>The Bidder to submit Manufacturer Authorization Form (MAF) from the OEMs.</p>	<p>Self- Declaration should be submitted by the Original Equipment Manufacturer (OEM) for fulfilling the minimum technical specification of the product as per <b>Annexure 13</b>. OEM/ Dealer of the OEM should submit Manufacturer's Authorization Form (MAF) as per <b>Annexure 12</b>.</p>

S. No.	Minimum Eligibility Criteria-Pre-Qualification Criteria	Document to be submitted
		(In case of sole Bidder, it should be met by the sole Bidder itself, whereas in case of Consortium, the Lead member of the Consortium should fulfil the relevant criterion)
<p><b>PQ 10</b></p>	<p><b>After Sales Support Capability:</b> The bidder shall have a functioning after sales support office in Maharashtra or shall open office in Maharashtra within fifteen (15) days in case of award of contract.</p>	<p>Copy of existing office address proof like lease agreement/ latest electricity bill (not older than 06 (six) months from the Bid Due date) in the name of the bidder</p> <p>In the absence of an existing office in Maharashtra, the bidder must submit an undertaking to setup office in Maharashtra, on letterhead of firm signed by authorized signatory as per the format provided in the GeM Bid document as per <b>Annexure 10</b>. (In case of sole Bidder, it should be met by the sole Bidder itself, whereas in case of Consortium, the Lead member of the Consortium should fulfil the relevant criterion)</p>
<p><b>PQ 11</b></p>	<p><b>Blacklisting criteria:</b> The bidder (all members in case of consortium) should not have been debarred by any Government (State / Central) / Semi Government / Corporation / Union Territories/ PSU/ any other local Body or body established under or in the control of the Central or state Government in India in last three (03) years for unsatisfactory past performance, corrupt, fraudulent or any other unethical business practices as specified in <b>Rule 151 of GFR</b>, as on date of bid submission.</p>	<p>Self-certification signed by the Authorized Signatory, on the company letter head as per format provided in this Bid document as per format in <b>Annexure 9</b>. (In case of sole Bidder, it should be met by sole Bidder itself whereas in case of Consortium, this would be applicable for each of the Consortium Members)</p>

S. No.	Minimum Eligibility Criteria-Pre-Qualification Criteria	Document to be submitted
PQ 12	<p><b>Minimum technical specification requirements.</b></p> <p>The bidder must meet the minimum technical specifications mentioned in the Bid document for the machines and other equipment's involved in for Supply, Installation, Testing, Training and Commissioning of RTWQMS</p>	<p>Self-certification signed by the Authorized Signatory, on the company letter head as per format provided in this Bid document as per <b>Annexure 21</b> along with other supporting documents like brochures.</p> <p>(In case of sole Bidder, it should be met by the sole Bidder itself, whereas in case of Consortium, either of the Consortium member should fulfil the relevant criterion individually for each of the instrument or jointly for overall individual instrument/ system)</p>

**\*Similar Works** - Similar Works - The similar works include supply, installation, commissioning (including data collection and transfer), operation and maintenance of titanium based Real Time Water Quality Monitoring Systems along with web-based system for monitoring and analyzing water quality parameters by users in India.

**\*\*Large scale industries** – Enterprises having more than 1,000 employees on payroll and fixed capital investment of more than INR 750 Crore (*Definition as per Maharashtra Industrial Policy 2019*).

Note: All documents to be provided by the bidder should be self-certified and valid to comply with the requirement.

### 3.2 Evaluation of Pre-Qualification Proposal

1. TEC shall review the pre-qualification proposal of the bidders to determine whether the requirements as mentioned in **Section 3.1** of the RFP are met. Incomplete or partial proposals are liable for disqualification. TEC reserves the right to seek clarification if required. All those bidders, whose all-pre-qualification proposal meets the requirements shall be selected for opening of the Qualifying technical proposal.
2. At any time during the Bid evaluation process, TEC may seek oral / written clarifications from the Bidders. The Committee may seek inputs from their professional and technical experts in the evaluation process.



### 3.3 Technical Qualification Criteria

The Bids qualifying through the Minimum Eligibility Criteria will be graded as per the criteria mentioned in the table below.

S. No.	Criteria	Evaluation Parameters	Max. Marks	Supporting Documents
TE 1.	<b>Financial Strength (15 Marks)</b>			
TE 1.1	Minimum Average Annual Turnover (MAAT) for the last three (03) audited financial years (FY 2021-22, FY 2022-23 & FY 2023-24) of the bidder should not be less than <b>INR 2.5 Crore (INR Two Crore Fifty Lakhs only)</b>	Average Annual Turnover (in INR) (Cr.) 1) $\geq 2.5$ Cr. and $< 05$ Cr. : <b>05 marks</b> 2) $\geq 05$ Cr. and $< 10$ Cr. : <b>10 marks</b> 3) $\geq 10$ Cr.: <b>15 marks</b>	15	a) Audited Financial Statements (Balance Sheet and Profit & Loss Statements) from the Statutory Auditor/Chartered Accountant and b) Certificate duly signed by Statutory Auditor of the Bidder for total turnover as per the format in <b>Annexure 5.</b> (In case of sole Bidder, it should be met by the sole Bidder itself. Whereas in case of Consortium, either of the Consortium member should fulfil the relevant criterion)
TE 2.	<b>Bidder's Relevant Strength (50 marks)</b>			
TE 2.1	The Bidder must have experience in similar works with any State Government / Central Government / PSU / Union Territory (UT) / Urban Local Body (ULB)/ Govt in India/ large scale industries in past seven (07) years as on date of submission of bid per following details: - One (01) project worth <b>INR 6.5 Crore</b> (Six Crore Fifty Lakhs and above) OR - Two (02) projects worth <b>INR 4.0 Crore</b> (Four Crore and above)	<b>Project value of maximum any three projects submitted</b> <b>Maximum three projects</b> <b>Value of the Project</b> 1) $\geq 6.5$ Cr and $< 9.5$ Cr: <b>5 marks</b> 2) $\geq 9.5$ Cr and $< 12.5$ Cr: <b>8 marks</b> 3) $\geq 12.5$ Cr: <b>10 marks</b>	10	a) Bidders shall submit copy of work order/ contract agreement mentioning the relevant scope of Work. b) Completion Certificate from the client OR In case of on-going project, partial completion certificate from the client on client's letter head mentioning the relevant scope of Work, having received the payment matching the 'Minimum Project Value' of the partially completed project.

S. No.	Criteria	Evaluation Parameters	Max. Marks	Supporting Documents
	OR - Three projects worth <b>INR 3.20 Crore</b> (Three Crore twenty Lakhs) and above			c) Project Citation as per format specified in <b>Annexure 4.</b> d) Declaration for having experience <b>Annexure 8.</b>
TE 2.2	The Bidder should have experience of “similar works” * of supplying at least <b>Five (05) nos. of river RTWQMS</b> along with Operation & Maintenance during the past Seven (07) years.	1) $\geq 05$ stations and $< 06$ stations: <b>10 marks</b> 2) $\geq 06$ stations. and $< 08$ stations: <b>15 marks</b> 3) $\geq 08$ stations.: <b>20 marks</b>  * For the purpose of marking, the number of titanium based real time water quality monitoring stations on rivers shall be considered	20	<b>*Only Completed projects shall be considered.</b>  (In case of sole Bidder, it should be met by the sole Bidder itself, whereas in case of Consortium, either of the Consortium member should fulfil the relevant criterion individually or jointly)
TE 2.3	The Bidder should have experience of successful installation of at least <b>Thirty (30) nos. of RTWQMS</b> during the past Seven (07) years in any **large-scale industries.	1) $\geq 30$ stations and $< 50$ stations: <b>10 marks</b> 2) $\geq 50$ stations. and $< 75$ stations: <b>15 marks</b> 3) $\geq 75$ stations : <b>20 marks</b>	20	
TE 3.	<b>Manpower strength (20 Marks)</b>			
3.1	The Bidder should have at least <b>Twenty (20)</b> Service Engineers experienced in Comprehensive O & M of RTWQMS, with either permanent PF account or professional tax account on bidder’s payroll as on bid submission date.	1) $\geq 20$ people $< 40$ resources: <b>10 marks</b> 2) $\geq 40$ and $< 60$ resources: <b>15 marks</b> 3) $\geq 60$ resources: <b>20 marks</b>	20	HR declaration as in format given in <b>Annexure 11.</b> (In case of sole Bidder, it should be met by the sole Bidder itself, whereas in case of Consortium, either of the Consortium member should fulfil the relevant criterion individually or jointly)
TE 4	<b>Presentation (15 marks)</b>			
4.1	Presentation by the bidders on their understanding of the business/ functional requirements of MPCBs and proposed solution and implementation approach.	<b>For presentation in below categories:</b>  Service Provider’s response on Terms of Reference will be scored on the following metrics.  Metrics: 1. Understanding of the scope of work	15	Presentation delivered by the bidder should depict Bidder's understanding of the business / functional requirements of the MPCB, the proposed solution and implementation approach.

S. No.	Criteria	Evaluation Parameters	Max. Marks	Supporting Documents
		<p>2. Execution Timelines with justifications: Day-wise plan to be developed and demonstrated with expected outcomes and deliverables for each day.</p> <p>3. Compliance reporting plan- Proposed reporting and Project Handover including approach for sharing detailed evaluation criteria and assessments carried out.</p> <p>4. Value Additions / differentiators that will benefit Government</p>		
		<b>Total</b>	100	

**\*Similar Works** - The similar works include supply, installation, commissioning (including data collection and transfer), operation and maintenance of Titanium based Real Time Water Quality Monitoring System along with web-based system for monitoring and analyzing water quality parameters by users for any government department/ PSUs/ industries in India.

**\*\*Large scale industries** – Enterprises having more than 1,000 employees on payroll and fixed capital investment of more than INR 750 Crore (*Definition as per Maharashtra Industrial Policy 2019*).

### 3.4 Technical Presentation

The bidders who successfully qualify the pre-qualification criteria shall be called for giving a technical presentation at the MPCB head office at a date and time that would be communicated at a later stage.

### 3.5 Bid Evaluation

#### 1. Overview of the Evaluation process

The following methodology and weightages will be used for objective evaluation of each of the bids.

- i. The bids from interested Bidders are invited through Procurement process.
- ii. The evaluation will be done using 03 (three) stage bid process:
- iii. In the first stage, EMD and pre-qualification proposal along with document checklist shall be opened and evaluated as per the criteria mentioned in the Bid document.
- iv. In the second stage, Technical Proposal of those Bidders, whose all pre-proposals (Prequalification criteria) qualify, shall be opened.
- v. In the third stage, the financial offer of the bidders fulfilling the Eligibility criteria shall be opened for further evaluation.

- vi. All Bids shall be opened in the presence of Bidder's representatives who choose to attend the Bid opening sessions on the specified date, time, and address.
- vii. The bidders will be selected based on QCBS.

## 2. Evaluation Process in QCBS

- a. TEC shall review the proposal of the Bidders to determine whether the requirements as mentioned in the Bid document are met. Incomplete or partial Proposals are liable for disqualification.
- b. The technical bid will be analysed and evaluated, based on **Quality and Cost Based Score**. Marks shall be assigned to each bid based on parameters mentioned below.
- c. The Bidders in compliance with the Eligibility Criteria mentioned in Section 3.1 and who have paid the Tender Fees and EMD Fees as specified in the RFP, shall be considered as “substantially responsive” bids.
- d. The marks awarded by the Evaluation Committee (EC) would be at its sole discretion and would be final. No plea of revision/reconsideration of the same shall be considered/entertained.
- e. The final selection will be done based on Quality cum Cost Based System (QCBS) wherein Relative Technical Bid Score will get a weightage of 70% and Relative Commercial Bid Score will get a weightage of 30%.
- f. Technical Bids receiving relative technical score greater than or equal to 70 (cut-off marks) will be eligible for consideration in the subsequent round of commercial evaluation.
- h. The technical bid will be analysed and evaluated, based on which the Relative Technical Score (RSTech) shall be assigned to each bid on the basis of parameters mentioned below.
- i. Relative Technical Score (RSTech) for each agency will be calculated as follows based on below parameters:  
$$RSTech = T / Thigh * 100$$

Where: RSTech = Relative score obtained by the bidder T = Technical score obtained by bidder  
Thigh = Highest Technical score secured among the bidders
- j. Technical Bids receiving a RSTech greater than or equal to a score of 70 (cut-off marks) will be eligible for consideration in the subsequent round of commercial evaluation.
- k. If less than 3 bidders qualify as per above criteria (RSTech  $\geq$  70), MPCB reserves the right to reduce the threshold score below 70.
- l. Financial proposal will be evaluated only in respect of those agencies which satisfy technical evaluation criteria.
- m. MPCB will determine whether the Financial Proposals are complete, and correct without any computational errors, if any.

Relative Financial/Commercial Score (RSCom) for each bidder will be calculated as follows:

$$RSCom = C_{Low} / C \times 100$$

Where: RSCom = Relative score for Commercial Bid of the bidder  
C= Commercial bid value of the bidder under consideration  
CLow = Lowest commercial bid value out of all the eligible commercial bids obtained.

- n. The eligible bidder will be selected based on maximum Relative Score (RS) obtained.
- o. The bidder with the highest Relative Score (RS) will be awarded with the Work Order for the project.
- p. In case of a tie after the commercial evaluation stage, MPCB's decision will be final and will be based on marks scored in the technical evaluation only.
- q. The bidders should necessarily give the commercial details in the format given in this RFP. The commercial proposals should be given in the prescribed format only and in accordance with the details, terms, and conditions as mentioned in the RFP (hence the bidder is expected to understand the RFP in all respects).
- r. In case the selected bidder does not quote for or provision for cost/expenses required to meet the requirements of the RFP, the selected bidder shall be solely responsible for those and shall provide them, without any additional cost to MPCB.
- s. Please note that TEC may seek inputs/ clarification from their professional, external experts in the bid evaluation process
- t. The Selected Bidder will enter into a Contract with MPCB and shall work in accordance with the Scope of Work mentioned in the RFP.

### 3.6 Disqualification/Exclusion of Proposal

MPCB may exclude or disqualify a Proposal if:

- a. The information submitted, concerning the qualifications of the Bidder, was false or constituted a misrepresentation.
- b. The information submitted, concerning the qualifications of the Bidder, was materially in- accurate or incomplete.
- c. The Bidder is not qualified as per Qualification Criteria mentioned in the RFP document.
- d. The Proposal materially departs from the requirements specified in the Proposal or it contains false information.
- e. The Bidder submitting the Proposal, his agent or anyone acting on his behalf, gave or agreed to give, to any officer or employee of the MPCB or other governmental authority a gratification in any form or any other thing of value so as to unduly influence the Selection Process.
- f. The Bidder in the opinion of the MPCB, has a Conflict of Interest materially affecting fair competition.
- g. A Proposal shall be excluded/ disqualified as soon as the cause for its exclusion/disqualification is discovered.

### **3.7 Award of the Contract**

The final choice of MPCB to award this project to a suitable bidder to execute this project shall be made on the basis of Quality cum Cost Based System (QCBS) wherein Relative Technical Bid Score will get a weightage of 70% and Relative Commercial Bid Score will get a weightage of 30%.

### **3.8 MPCB's Right to accept any Bid and to reject any or all bids.**

MPCB reserves the right to accept or reject any Bid, and to annul the bidding process and reject any or all Bids at any time prior to award of Contract, without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the grounds for MPCB's action.

### **3.9 Award of Contract**

1. Post the evaluation process indicated in Section above, MPCB shall award the Contract to the Successful Bidder as defined in this Bid document.
2. The term shall be as specified under section NOTICE FOR REQUEST FOR PROPOSAL
3. In case MPCB is not satisfied with the performance of the supplier, MPCB reserves the right to terminate the contract with such supplier.

### **3.10 Letter of Intent (LoI)**

MPCB will notify the Successful Bidder for selection in writing or by email, to be confirmed in return by letter and email, that its bid with negotiated cost has been accepted. The Letter of Intent will constitute the formation of the contract. MPCB will promptly notify each unsuccessful bidder.

### **3.11 Issuance of Work Order**

MPCB will issue Work Order to the Successful Bidder based on the process defined in clause 3.1 and will mark the Timeline "T" of the project work to be started as stated in clause 4.10. After issuance of Work Order, the Successful Bidder shall have to submit Performance Bank Guarantee (PBG as Security Deposit) within seven (7) days. Failing to submit the PBG within stated time will either attract penalty of INR 5000 per day up to One (1) week which will be deducted from any future successful Work Order, or the Work Order may be cancelled and awarded to the other eligible agency who participated in the bid.

### **3.12 Signing of Contract Agreement**

1. The Successful Bidder shall enter into contract agreement with MPCB within Thirty (30) days after Letter of Acceptance / Intent (LOA/LOI) issued to the eligible agency by MPCB.

2. If signed contract documents are not received by MPCB within time Thirty (30) days or with extension granted), shall not be accepted.
3. Further, INR 2000 penalty will be levied per day if the contract is not signed within abovementioned time period.
4. Any expenses related to registration of Agreement shall be Borne by Successful Bidder.

## SECTION 4: SCOPE OF WORK

Maharashtra is home to several major rivers like Godavari, Krishna, Tapi, and Bhima. These rivers continue to serve as vital lifelines for the state's inhabitants. However, the accidental discharge of industrial effluent, sewage from urban local bodies, agricultural runoff in the river system has led to water pollution and degradation of aquatic ecosystems. CPCB in the year 2022 identified 55 polluted river stretches. As per latest scenario of polluted river stretches- Maharashtra has 02 polluted stretches in priority I, 04 in II, 06 in III, 11 in IV and 28 in V (Dec 2023). It is necessary to monitor the sources and reasons for water pollution, impeding the effectiveness of solutions. The CPCB and MPCB has a requirement for measurement and delivery of titanium based real-time water quality data from numerous points along the Rivers in Maharashtra. Titanium offers superior corrosion resistance, durability, and non-reactivity, making it ideal for Real-Time Water Quality Monitoring Systems (RTWQMS) in harsh environments. Its use ensures long-term reliability, reduces maintenance, and delivers accurate data in challenging aquatic conditions, such as rivers exposed to pollutants. Hence the department is mandating titanium-based systems to enhance the project's sustainability and operational efficiency.

The real time water quality monitoring equipment shall have also a surveillance camera with day and night vision at each of the station. The camera at each of the station should provide continuous streamed footage/ visualization of the real time value (screen) and the nearby area including the sensors immersed in the river, at every 60 minutes. The connectivity of the camera is to be provided to MPCB through the web portals on 24x7 basis and should operate continuously. The output of the CCTV camera should also be connected with the DVR/NVR and the data for one month should be kept as backup retrievable through the software provided to MPCB.

### **Phase wise Installation –**

Real time monitoring stations will be installed at 10 National Water Monitoring Program (NWMP) stations in the first phase in the priority I, II and III stretches identified by MPCB.

### **4.1 Overview of this Project Structure**

Successful Bidder would be awarded the project/work under a Supply and Service Agreement, which would entail:

1. Supply, installation and Commissioning of One Set of RTWQMS Equipment at the defined cities/ locations.
2. Operation and Maintenance of the RTWQMS for a period of 3+2 years from the date of its commissioning
3. Daily reporting of data pertaining to Riverwater Quality to MPCB
4. MPCB would make payment for RTWQMS as per schedule of requirement, for Supply, Installation and Commissioning of the system. MPCB would procure all the RTWQMS equipment on its name. MPCB will make regular payments for the O&M and Supply of Data at the end of each Quarter. The bidders therefore need to quote two prices for:



- a. Supply, Installation and Commissioning of the Systems 10 Nos, as per invitation for bids section.
- b. Reporting of data to MPCB. The price for the data Supply would include the Operation and Maintenance, including incidental charges, electricity, providing manpower at site, security, etc.

#### 4.2 Scope of Services under this Project:

The Scope of Works under the package shall include:

1. The Supply including packing, transportation, insurance, customs clearance, port clearance and handling, inland transportation, inland transit insurance and delivery to site, installation, testing and commissioning of equipment and provision of training of MPCB officials' station wise.
2. Operation & Maintenance of Riverwater monitoring Stations for a period of five (3+2) years from the date of commissioning of the station, which can be extended up to three (3) years at the mutually agreed rates and terms and conditions.
3. Data & Report of data pertaining to RTWQMS to MPCB.
4. Online transfer of data to MPCB and CPCB and establishing connectivity to AQI server at MPCB and CPCB.

#### 4.3 Fixed Stations for Data collection

Fixed station sites are points along the waterway reach which are indicated in **Annexure 24** where measurements of water quality are required on hourly basis. Measurements will be made at or near the portion of the stream where maximum flow is experienced. Sensor packages can utilize bridge piers or other structures keeping in view the need for protecting the sensor package as also ensuring unobstructed flow of water in the vicinity of the sensor package as far possible. Since these stations are fixed by utilizing bridge piers or other structures, these are unmovable and hence called fixed stations.

If the flow regime changes over a period, the instruments/equipment must be relocated to a point where maximum flow is experienced. On an average, such relocations may not be required more than twice per year and approval of any relocation lies with MPCB.

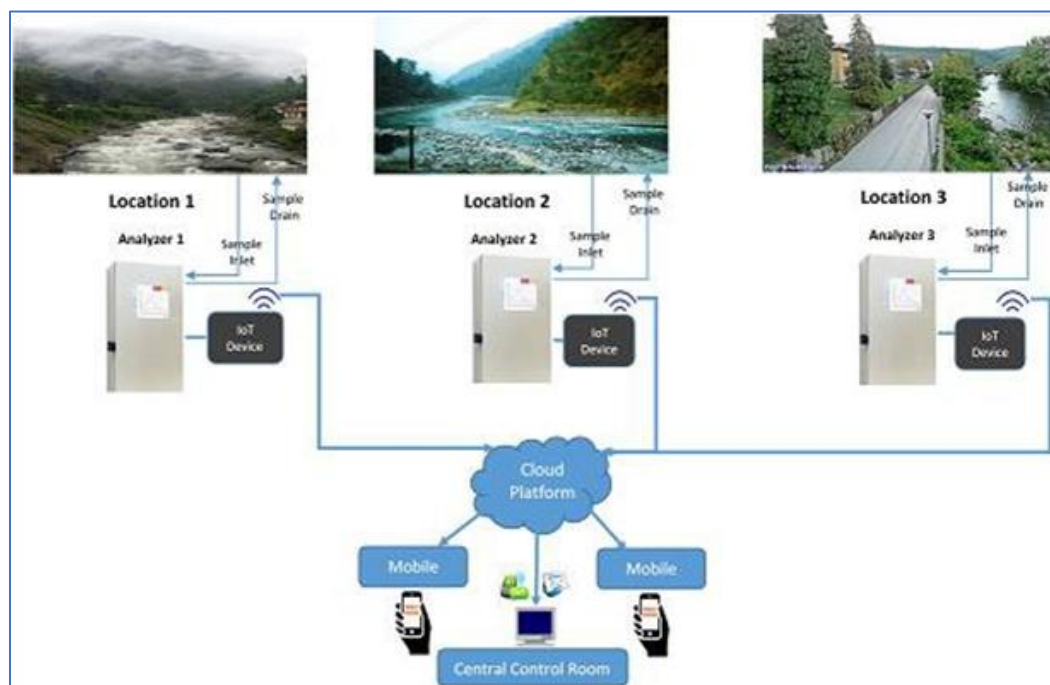
No Floating Stations are included and allowed in this bid. RTRWQM stations - The fixed station will have data automatically relayed to the MPCB's Data Center within 15 minutes of the measurement/observation to qualify for payment. The RTRWQM Stations can thereon upload the photo with a time stamp with a time lag of 15 minutes.

##### 4.3.1 Data Collection

The fixed stations will measure water quality parameters once per hour  $\pm 5$  five minutes and transfer all log data within 15 minutes of measurement.

### 4.3.2 Data Storage

The Service Provider shall store all real-time data collected during the duration of the contract. This storage shall be 100% online. This means that any data values can be called up instantaneously throughout the duration of the contract. In the event of any contingency, the Service Provider will provide access on the MPCB's request for downloading any part or the entire database maintained in the Service Provider's server.



\* The image above is provided for reference purpose only. The Bidders is advised to visit the site and collect necessary information as required for execution of the contract.

### 4.4 Technical Specifications and Salient Features Regarding Online Water Quality Monitoring System

1. The Selected Bidder is free to choose any type/ make of analysers including the indigenous equipment meeting the prerequisites. The unit should give calibration protocol, periodicity/ frequency of calibration and  $\pm 15$  variation specified when matched with manually monitored results.
2. The systems installed or to be installed which may include sensors/ electrodes/ data communicating devices or other related devices, should have the certification of institutions like TUV, BIS/CSIR-NPL etc.
3. The system supplier will comply with testing/calibration protocol as per International Standards.
4. The analysers should have capability to generate digital output and communicate directly with the software for 100% data & information on health of the analysers (diagnostics).

5. The data from installed location should seamlessly be transmitted to Maharashtra Pollution Control Board.
6. Should have provision to send system alarm to server in case any changes are made in configuration or calibration.
7. Software should support data export in ISO -7168 format.
8. The system supplier has to provide remote on-demand access to all the internal registers, configuration file and system diagnostics for protocol integration with the supplied software.
9. The supplied software should be capable and compatible with the existing central platform of Maharashtra Pollution Control Board.
10. The system should have provision to connect at least four additional analyzers as and when required.
11. Should be capable of operating unattended over prolonged period.
12. System should be UV-Visible double beam spectrometry.
13. The system should have a multipoint calibration facility.
14. System should be complied as per latest CPCB Direction.
15. System should be complied new SOP published by CPCB.
16. Should produce analytically valid results with precision and repeatability.
17. The instrument/Analyzer should be robust and rugged, for optimal operation under extreme environmental conditions, while maintaining its calibrated status.
18. The Analyzer should have inbuilt features for automatic water matrix change adaption.
19. The instrument / Analyzer should have onboard library of calibration spectras for different industrial matrices with provision of accumulating further calibration matrices.
20. Should have data validation facility with features to transmit raw and validated data to MPCB central server.
21. Should have Remote system access from MPCB central server provisioning log file access.
22. Should have provision for multi-server data transmission from each station without intermediate PC or plant server.
23. Should have provision to send system alarm/SMS/WhatsApp/email to MPCB in case any changes made in configuration or calibration.
24. Should have provision to record all operation information in log file.
25. For each parameter there should be provision for independent analysis, validation, calibration & data transmission.
26. Must have provision of a system memory (non-volatile) to record data for at-least one year of continuous operation.
27. Should have provision of Plant level data viewing and retrieval with selection of Ethernet, wireless, Modbus & USB.
28. The correlation/interpretation factor for estimating COD and BOD using UV-Visible Absorption Technique shall be regularly authenticated/ validated and details provided.
29. Record of calibration and validation should be available on real time basis on MPCB central server from each location/parameter.
30. Record of online diagnostic features including sensor status should be available in database

- for user friendly maintenance.
31. Expandable program to calculate parameter load daily, weekly, or monthly basis for future evaluation with flow rate signal input.
  32. Must have low operation and maintenance requirements with low chemical consumption and recurring cost of consumables and spares.
  33. System must support visualization of parameters data onboard which is real time and records on real time basis.
  34. Sensor should be operational in high Chloride applications.
  35. Sensor IP68 rating and specially designed for submerged installations and all sensor cable must be interchangeable.
  36. MOC of Sensor should be Titanium grade or better with ultrasonic cleaning and optional compressed air cleaning.
  37. All the remote stations should be operational in a real time mode and MPCB central station should be able to access any remote station.
  38. The remote stations should be field operational and tolerant to extreme environmental conditions in India, in high or low temperatures, high humidity coastal conditions and high temperature.
  39. The communication between Remote and MPCB Central Receiving station must be two-way communication system utilizing GPRS.
  40. Remote station should have built in GPS receiver for automatic position determination.
  41. Multiple Component Analysis with Pattern Recognition & Library of Effluent Matrix Variant.
  42. Multiple Component analysis with Multi- Point Calibration for Total COD, BOD, TSS etc.
  43. Individual parameter method analysis, Individual Calibration, Individual Validation without any coefficient calculation from one parameter to another.
  44. Online data acquisition, monitoring & control system through local & remote terminals, based on GSM/WiFi or any other suitable System, including Supply of Field Instruments for the RTRMS.

#### 4.3.3 Additional Technical Points

1. System should work on wavelength of 200-720 nm, and all analyses should have independent values.
2. System should have UV Visible dual beam technology.
3. System must have Automatic File Transfer features.
4. Automatic Sampling for laboratory measurement Feature Onboard.
5. PLC Based basic features for process control to comply regulatory guidelines.
6. System must have optimal display readability with Classic-, Day- and Night-Mode.
7. Quality controlled and documented status management of probes and stations must be available to eliminate the need for paper logbooks.
8. Analyzer must provide self-adaptive, self-controlled data validation in real time.
9. It must ensure both sensitive and reliable alarm limits respectively setpoints for process

- control.
10. Analyzer System must analyse noise, outliers, and other combinations in real time to reliably detect any malfunction at an early stage.
  11. Analyzer System must help to dramatically reduce false alarm rates.

#### 4.5 Technical Specifications

Sensors shall meet the following specifications:

##### Spectrometry Based multi-parameter probe:

1. No consumables will be required for use within the next three years.
2. System should have built-in spectral information for River Water Quality data.
3. No sample preparation required.
4. Sensor shall be submersible in open channels or tanks.
5. No moving parts in contact with Drain/River water.
6. Auto compensation of potential interference by turbidity/solids.
7. All sensors should be IP68 and transmitter/display should be IP65.
8. Auto diagnostic features.

##### 4.5.1 Minimum specification for pH Sensor

S. No.	Parameter	Specification
1	Basic Requirement	<p><b>pH Sensor Specifications:</b></p> <ul style="list-style-type: none"> <li>• Integrated temperature measurement and compensations should be provided in the pH sensor.</li> <li>• The pH sensor should have galvanically separated input.</li> <li>• Calibration history should be stored automatically in the sensor.</li> <li>• Field Sensor calibration</li> <li>• Signal Output – Digital</li> <li>• Sensor Check function/Diagnostics should be available in the pH sensor.</li> <li>• protection type: IP 68</li> </ul>
2	Measuring Range	<ul style="list-style-type: none"> <li>• Measuring Range: pH: 0 - 12 (Sensor should be designed for wastewater application)</li> <li>• Measuring: 0 - 45 °C</li> </ul>
3	Measuring Principle	ISE - Potentiometric
4	Sensor Cable	15-meter cable (minimum) with arrangement to increase length as per site conditions and all sensor cable must be interchangeable
5	Operating Temperature	Temp Compensation: 0 to + 45 °C
6	Material of Construction of	The model/ make of the pH sensor should be top of the

S. No.	Parameter	Specification
	sensor	line.
7	Calibration	Calibrate pH meter with Certified (having international traceability) Buffer solutions of pH 4, 7, 9.2 & 10. Perform at-least two-point calibration within the expected range of the pH in the plant. For example, if pH is expected to be 7.8 then perform two points calibration with pH 7 and 9.2.
8	Reagent Free	The pH combination electrodes should require very little maintenance and there should be no electrolyte replacement.
9	Voltage Protection	Transient Voltage Protection should be integrated in the sensor
10	Accuracy	≤ 0.1 units of pH certified reference standard
11	Resolution	≤ 0.01 units of pH
12	Response Time	≤ 30 seconds
13	Method of Measurement	Potentiometric-Automatic compensation of Temperature
14	Cleaning	Automatic cleaning
15	Operating Humidity	5 to 95% non-condensing
16	Interface connection to display	sys plug (IP 67), RS485
17	Protection Class	IP68 for sensor
18	Pressure Resistance	10 Bar
19	Transmitter Mounting	Pole/wall mounted
20	Display	Large, color display with user-friendly buttons in all weather conditions
21	Datalogger	Minimum 5,00,000 data points or better
22	Controller	Should have provision of at least 20 sensors for future upgradation
23	Automatic sensor recognition feature	Required
24	Remote Access	Full remote access feature required
25	Controller to Display distance	Up to 3 km cable length required as per site conditions
26	Enclosure Material	Stainless Steel with epoxy coating for Analyser or similar kind
27	Tag plate	SS Tag plate

#### 4.5.2 Specifications for Biochemical Oxygen Demand (BOD) sensor

S. No.	Parameter	Specification
1	Basic Requirement	<p>Continuous Riverwater Monitoring of BOD, COD, TSS with UV-Vis Full Spectrum dual beam technology.</p> <ul style="list-style-type: none"> <li>• System should work on wavelength of 200-750nm as per the CPCB guidelines and all analyses should have independent values.</li> <li>• System should have spectrophotometric probe made of <b>Titanium</b>.</li> <li>• Multi Parameter probe ideal for monitoring of BOD/COD/TSS in Municipal Wastewater.</li> <li>• The Sensor should have optimized function check referencing for excellent zero point and long-term stability.</li> <li>• The Sensor should provide compensation of interferences by evaluation of the whole measured spectrum.</li> <li>• System should be UV-Visible double beam spectrometry.</li> <li>• System should have unlimited multipoint calibration facility as per <b>CPCB SOP published on CPCB website in July 2020</b>.</li> <li>• System should be complied with as per latest CPCB Direction, SOP &amp; Guidelines.</li> <li>• Should produce analytically valid results with precision and repeatability.</li> <li>• The instrument/Analyzer should be robust and rugged, for optimal operation under extreme environmental conditions, while maintaining its calibrated status.</li> <li>• The Analyzer should have inbuilt features for automatic water matrix change adaption.</li> <li>• The instrument / Analyzer should have onboard library of calibration spectra for different industrial matrices with provision of accumulating further calibration matrices.</li> <li>• For each parameter there should be provision for independent analysis, validation, independent parameter calibration &amp; data transmission.</li> <li>• Sensor IP68 rating and specially designed for submerged installations and all sensor cable must be interchangeable.</li> </ul>
2	Measuring Range	0 - 200 mg/L (with possibility to check higher ranges)
3	Accuracy	<p>+/- 2.0 % in reference solution.</p> <p>+/- 10% of Parameter value with reference to certified laboratory results or as per latest reference of published <b>CPCB SOP/Guidelines, whichever is less</b>.</p>
4	Reagent Free	<ul style="list-style-type: none"> <li>• The Sensor should not use any reagents and should be easy to</li> </ul>

S. No.	Parameter	Specification
		use and operate without any running costs. <ul style="list-style-type: none"> <li>The sensor should completely be reagent free for operation.</li> </ul>
5	Measuring Principle	UV-Visible is double Beam Spectrophotometry with multipoint calibration from wavelength 200 – 750 nm, as per the CPCB Guideline, xenon flash lamp, 256 photo diodes, two beam measurement, complete spectrum
6	Measurement	Must be direct In-Situ/Submersible measurement in Outlet or Inlet of wastewater treatment plant
7	Operating Temperature	0°C to + 45 °C;
8	MOC	The MOC must be Titanium grade or better to sustain the sensor in Sewage wastewater application.
9	Light Source	Must emit UV and Vis wavelength of light.
10	Sensor Cable	15-meter cable (minimum) with arrangement to increase length as per site conditions and all sensor cable must be interchangeable.
11	Inbuilt Cleaning	The sensor must have two mode of automatic cleaning facility with integrated system for cleaning at a predefined interval i.e., ultrasonic, and compressed air. Chemical cleaning is not recommended.
12	Calibration	Multipoint calibration for each spectrophotometric parameter
13	Protection Rating	IP 68
14	Certifications	TUV/MCERT/USEPA
15	Automatic compensation cross sensitivities	Turbidity / solids and temperature
16	Interface connection to display	MIL connector, IP 68, RS485, 12 VDC
17	Operating Humidity	5 to 95% non-condensing
18	Pressure	10 Bar
19	Power	12V DC Nominal
20	Signal output	Compatible with Data Acquisition System
21	Resolution	≤ 1 mg/L or better
22	Response Time	≤ 60 seconds
23	Protection	Sensor IP-68
24	Enclosure	Stainless Steel with epoxy coating for Analyzer or similar kind
25	Diagnostics features	<ul style="list-style-type: none"> <li>System diagnostics: power shutdown, sensor failure, data transmission failure.</li> <li>Parameter diagnostics: Calibration timeframe,</li> </ul>



S. No.	Parameter	Specification
		<p>calibration drift alert.</p> <ul style="list-style-type: none"> <li>▪ High/low parameter permissible thresholds limit diagnostic</li> <li>▪ Maintenance and calibration schedule diagnostics</li> </ul>
26	Calibration frequency	Once in a month
27	Transmitter Mounting	Pole/ wall mounted
28	Display	Large, color display with user-friendly buttons in all weather conditions
29	Surge Protection	Inbuilt
30	Tag Plate	SS tag plate

#### 4.5.3 Specifications for Chemical Oxygen Demand (COD) sensor

S. No.	Parameter	Specification
1	Basic Requirement	<p>Continuous Riverwater Monitoring of BOD, COD, TSS with UV-Vis Full Spectrum dual beam technology</p> <ul style="list-style-type: none"> <li>• System should work on wavelength of 200-720nm as per the CPCB guidelines and all analyses should have independent values.</li> <li>• System should have spectrophotometric probe made of Titanium</li> <li>• Multi Parameter probe ideal for monitoring of BOD/COD/TSS in Municipal Wastewater.</li> <li>• The Sensor should have optimized function check referencing for excellent zero point and long-term stability.</li> <li>• The Sensor should provide compensation of interferences by evaluation of the whole measured spectrum.</li> <li>• System should be UV-Visible double beam spectrometry.</li> <li>• System should have unlimited multipoint calibration facility as per CPCB SOP published on CPCB website in July 2020.</li> <li>• System should be complied as per latest CPCB Direction, SOP &amp; Guidelines.</li> <li>• Should produce analytically valid results with precision and repeatability.</li> <li>• The instrument/Analyzer should be robust and rugged, for optimal operation under extreme environmental conditions, while maintaining its calibrated status.</li> <li>• The Analyzer should have inbuilt features for automatic water matrix change adaption.</li> <li>• The instrument / Analyzer should have onboard library of calibration spectras for different industrial matrices with</li> </ul>

S. No.	Parameter	Specification
		<p>provision of accumulating further calibration matrices.</p> <ul style="list-style-type: none"> <li>For each parameter there should be provision for independent analysis, validation, independent parameter calibration &amp; data transmission.</li> <li>Sensor IP68 rating and specially designed for submerged installations and all sensor cables must be interchangeable.</li> </ul>
2	Measuring Range	0 - 300 mg/L (with possibility to check higher ranges)
3	Accuracy	<p>+/- 2.5% in reference solution.</p> <p>+/- 10% of Parameter value with reference to certified laboratory results or as per latest reference of published CPCB SOP/Guidelines, whichever is less.</p>
4	Reagent & Consumables Free	<ul style="list-style-type: none"> <li>The Sensor should not use any reagents and should be easy to use and operate without any running costs.</li> <li>The sensor should completely be reagent free for operation.</li> </ul>
5	Resolution	≤ 1 mg/L or better
6	Response Time	≤ 60 seconds
7	Measuring Principle	UV-Visible is double Beam Spectrophotometry with multipoint calibration from wavelength 200 – 750 nm, as per the CPCB Guideline, xenon flash lamp, 256 photo diodes, two beam measurement, complete spectrum
8	Measurement	Must be direct In-Situ/Submersible measurement in Outlet or Inlet of wastewater treatment plant
9	Operating Temperature	0°C to +45 °C;
10	MOC	The MOC must be Titanium grade or better to sustain the sensor in Sewage wastewater application.
11	Light Source	Must emit UV and Vis wavelength of light.
12	Sensor Cable	15-meter cable (minimum) with arrangement to increase length as per site conditions and all sensor cable must be interchangeable
13	Inbuilt Cleaning	The sensor must have two mode of automatic cleaning facility with integrated system for cleaning at a predefined interval i.e., ultrasonic, and compressed air. Chemical cleaning is not recommended.
14	Calibration	Multipoint calibration for each spectrophotometric parameter
15	Protection Rating	IP 68
16	Certifications	TUV/MCERT/USEPA
17	Automatic compensation cross sensitivities	turbidity / solids
18	Interface connection	MIL connector, IP 68, RS485, 12 VDC

S. No.	Parameter	Specification
	to display	
19	Operating Humidity	5 to 95% non-condensing
20	Pressure	10 Bar
21	Power	12V DC Nominal
22	Signal Output	Compatible with Data Acquisition system
23	Protection	Sensor IP-68 and Transmitter IP-67
24	Enclosure	Stainless Steel with epoxy coating for Analyzer or similar kind
25	Diagnostics features	<ul style="list-style-type: none"> <li>▪ System diagnostics: power shutdown, sensor failure, data transmission failure.</li> <li>▪ Parameter diagnostics: Calibration timeframe, calibration drift alert</li> <li>▪ High/low parameter permissible thresholds limit diagnostic</li> <li>▪ Maintenance and calibration schedule diagnostics</li> </ul>
26	Calibration frequency	Once in a month
27	Transmitter output	Default: 2 X 4-20 mA Additional optional: MODBUS RS485, HART, PROFIBUS.
28	Transmitter Mounting	Pole/ wall mounted
29	Display	Large, color display with user-friendly buttons in all weather conditions
30	Surge Protection	Inbuilt

#### 4.5.4 Specifications for Total Suspended Solids (TSS) sensor

S. No.	Parameter	Specification
1	Basic Requirement	<p>Continuous Riverwater Monitoring of BOD, COD, TSS with UV-V is Full Spectrum dual beam technology.</p> <ul style="list-style-type: none"> <li>• System should work on wavelength of 200-750nm as per the CPCB guidelines and all analyses should have independent values.</li> <li>• System should have spectrophotometric probe made of Titanium or better</li> <li>• Multi Parameter probe ideal for monitoring of BOD/COD/TSS in Municipal Wastewater.</li> <li>• The Sensor should have optimized function check referencing for excellent zero point and long-term stability.</li> <li>• The Sensor should provide compensation of interferences by evaluation of the whole measured spectrum.</li> <li>• System should be UV-Visible double beam spectrometry.</li> <li>• System should have unlimited multipoint calibration facility as per</li> </ul>

S. No.	Parameter	Specification
		<p>CPCB SOP published on CPCB website in July 2020</p> <ul style="list-style-type: none"> <li>• System should be complied as per latest CPCB Direction, SOP &amp; Guidelines.</li> <li>• Should produce analytically valid results with precision and repeatability.</li> <li>• The instrument/Analyzer should be robust and rugged, for optimal operation under extreme environmental conditions, while maintaining its calibrated status.</li> <li>• The Analyzer should have inbuilt features for automatic watermatrix change adaption.</li> <li>• The instrument / Analyzer should have onboard library of calibration spectra for different industrial matrices with provision of accumulating further calibration matrices.</li> <li>• For each parameter there should be provision for independent analysis, validation, independent parameter calibration &amp; data transmission.</li> <li>• Sensor IP68 rating specially designed for submerged installations and all sensor cable must be interchangeable</li> </ul>
2	Measuring Range	0 - 300 mg/L (with possibility to check higher ranges)
3	Accuracy	With Calibration: <1% of the measured value $\pm 0.01$ FNU/NTU $\pm 10\%$ of Parameter value with reference to certified laboratory results or as per latest reference of published CPCB SOP/Guidelines, whichever is less.
4	Reagent & Consumables Free	<ul style="list-style-type: none"> <li>• The Sensor should not use any reagents and should be easy to use and operate without any running costs.</li> <li>• The sensor should completely be reagent free for operation.</li> </ul>
5	Resolution	$\leq 1$ mg/L or better
6	Response Time	$\leq 60$ seconds
7	Measuring Principle	UV-Visible is double Beam Spectrophotometry with multipoint calibration from wavelength 200 – 720 nm, as per the CPCB Guideline, xenon flash lamp, 256 photo diodes, two beam measurement, complete spectrum
8	Measurement	Must be direct In-Situ/Submersible measurement in Outlet or Inlet of wastewater treatment plant
9	Operating Temperature	0°C to + 45 °C;
10	MOC	The MOC must be Titanium grade or better to sustain the sensor in river application.
11	Light Source	Must emit UV and Vis wavelength of light.
12	Sensor Cable	15-meter cable (minimum) with arrangement to increase length as per

S. No.	Parameter	Specification
		site conditions and all sensor cable must be interchangeable
13	Inbuilt Cleaning	The sensor must have two mode of automatic cleaning facility with integrated system for cleaning at a predefined interval i.e., ultrasonic, and compressed air. Chemical cleaning is not recommended.
14	Calibration	Multipoint calibration for each spectrophotometric parameter
15	Protection Rating	Protection type: IP 68
16	Certifications	TUV/MCERT/USEPA
17	Automatic compensation cross sensitivities	turbidity / solids
18	Interface connection to display	RS485, 24VDC
19	Operating Humidity	5 to 95% non-condensing
20	Pressure	10 Bar
21	Power	24 V DC
22	Signal output	Compatible with Data Acquisition System
23	Protection	Sensor IP-68 and Transmitter IP-66
24	Enclosure	Stainless Steel with epoxy coating for Analyzer or similar kind
25	Diagnostics features	<ul style="list-style-type: none"> <li>▪ System diagnostics: power shutdown, sensor failure, data transmission failure.</li> <li>▪ Parameter diagnostics: Calibration timeframe, calibration drift alert.</li> <li>▪ High/low parameter permissible thresholds limit diagnostic.</li> <li>▪ Maintenance and calibration schedule diagnostics.</li> </ul>
26	Calibration frequency	Once in a month
27	Transmitter output	Default: 2 X 4-20 mA Additional optional: MODBUS RS485,HART, PROFIBUS.
28	Transmitter Mounting	Pole/ wall mounted
29	Display	Large, color display with user-friendly buttons in all weather conditions
30	Surge Protection	Inbuilt

#### 4.5.5 Specifications for Nitrate (NO<sub>3</sub>-N)

S. No	Parameter	Specification
1	Measurement Principle	Potentiometric
2	Measurement Range	1- 1,000 mg/l
3	Resolution	1 mg/l
4	Calibration	± 5 % of measured value ± 0.2 mg/l or better
5	Reagent Free	The Ammoniacal Nitrogen and Nitrate Nitrogen electrodes should require very little maintenance and they should not require any add on chemical for continuous measurement.
6	Pressure Resistance	Maximum 0.2 Bar
7	Sensor Cable	15-meter cable with arrangement to increase length as per site conditions and all sensor cable must be interchangeable.

#### 4.5.6 Specifications for Chloride

S. No.	Parameter	Specification
1	Measurement Range	0.1 - 1,000 mg/l
<b>CHEMICAL METHOD</b>		
2	Chloride	Ion Selective Electrode
3	Temperature Measurement and compensation	Integrated NTC thermistor
<b>MEASUREMENT PERFORMANCE</b>		
4	Accuracy	± 5 % of measured value ± 0.2 mg/l in standard solution or better
5	Repeatability	<Max. ±5 % of reading <sup>3</sup> or ±0.030 ppm (whichever is the greater)
6	Resolution	0.001 ppm or 1 ppb
7	Measurement units	mg/l, ppm, ppb, µg/l
8	Calibration	2-point-calibration possible with multiple standard solution
<b>ENVIRONMENTAL DATA</b>		
9	Ambient Operating Temperature	32 °F - 104 °F (0 °C - +45 °C)
10	Ambient Operating Humidity	Up to 95 % RH non-condensing
11	Sample Temperature	1°C to 40 °C (32 °F to 104 °F)

#### 4.5.7 Specifications for Dissolved Oxygen

S. No.	Parameter	Specification
1	Measuring Principle	Fluorescence
2	Resolution	0.01 mg/l O <sub>2</sub>
3	Accuracy (Standard Solution)	O <sub>2</sub> : +/- 0.02 mg/l or +/- 1 %* (*whichever is greater)
4	Response Time (T90)	60 sec.
5	Reference Standard	Saturated Sodium Sulfite Solution
6	Integrated Temperature sensor	0 - 50 °C
7	Operating Temperature	0 - 45 °C
8	Operating Pressure	0 - 7 bar
9	Installation / Mounting	Submersed or in a flow cell
10	Ingress Protection Class	IP68
11	Automatic Cleaning	Media: compressed air Permissible pressure: 2 - 4.5 bar
12	Storage Temperature	0 - 45 °C

#### 4.5.8 Specifications for Turbidity

S. No.	Parameter	Specification
1	Measurement Principle	Scattered light measurement in accordance with EN ISO 7027 (DIN EN 27027 or ISO 7027)
2	Measurement Range	User Selectable 0 - 0.4, 0.4 - 4.00, 4.00 - 40.00, 40.00 - 400.00, 400 - 4000
3	Resolution	1 mg/l
4	Accuracy	< 1 % in the range to 2000 FNU
5	Cleaning	Ultrasonic Cleaning
6	Repeatability limit or repeatability according to DIN ISO 5725 or DIN 1319 respectively	< 0.015 % or min. 0.006 FNU
7	Pressure Resistance	Maximum 10 Bar
8	Sensor Cable	15-meter cable with arrangement to increase length as per site conditions and all sensor cable must be interchangeable.
9	Ingress Protection	IP68

#### 4.5.9 Specifications for Conductivity

S. No.	Parameter	Specification
1	Measuring Principle	4-electrode, direct-contact
2	Resolution	1 µS/cm or 0.01 mS/cm
3	Accuracy (Standard Solution)	±2 % of measured value or better

S. No.	Parameter	Specification
4	Automatic Compensation Instrument	Temperature
5	Integrated Temperature Sensor	-20 - 90 °C
6	Operating Temperature	0 - 45 °C
7	Operating Pressure	0 - 10 Bar
8	Installation / Mounting	submersed or in a flow cell
9	Process Connection	quick connect
10	Flow Velocity	0.01 m/s (min.) to 3 m/s (max.)
11	Automatic Cleaning	Ultrasonic and compressed air
12	Storage Temperature	0 to 45 °C
13	Protection Class (-075)	IP68

#### 4.5.10 Specifications for Ammonia

S. No.	Parameter	Specification
1	Measuring Principle	Potentiometric
2	Range	NH <sub>4</sub> -N: 1 - 2,000 mg/l / 1 mg/l; 0.1 - 100 mg/l / 0,1 mg/l
3	Resolution	0.1 mg/l
4	Accuracy (Standard Solution)	± 5 % of measured value ± 0.2 mg/l in standard solutions
5	Response Time (T90)	0 - 60 sec.
6	Operating Temperature	0 - 65°C
7	Operating Pressure	0 - 1 Bar
8	Installation / Mounting	submersed or in a flow cell
9	Flow Velocity	0.01 m/s (min.), 3 m/s (max.)
10	Automatic Cleaning	Ultrasonic and compressed air
11	Storage Temperature (Electrode)	2 - 45 °C
12	Storage Temperature (Sensor)	2 - 45 °C
13	Protection Class	IP68

#### 4.5.11 Specifications for Smart Controller and Data logger

S. No.	Parameter	Specification
1	Basic Requirement	<p>Controller should have the latest features of highly advanced Multi Parameter Controller having capability of handling at least 20 Sensors in a single controller configuration for the parameters COD, BOD, TSS, pH, NH<sub>4</sub>-N, Cl, NO<sub>3</sub>-N and must be expandable for more parameters &amp; sensors as and when required.</p> <ul style="list-style-type: none"> <li>• With Sensor ID recognition</li> <li>• High EMC interference immunity</li> <li>• Control unit should be rugged with keypad</li> </ul>



S. No.	Parameter	Specification
		<ul style="list-style-type: none"> <li>• Integrated lightning protection</li> <li>• With integrated back up controller function</li> <li>• The system should start automatically after the power is reset to the system (in case of power failure).</li> <li>• The system should have Servicemode for cleaning/ calibration /maintenance activities.</li> <li>• High-end IoT (Internet of Things) terminal preferably based on an industrial PC, minimum IP65 grade.</li> <li>• Sensor and station management of up to 20 parameters: automatic cleaning, data logging, sample &amp; calibration incl. history and multipoint calibration, sensor function check, user management, easy data transfer via USB-stick etc.</li> <li>• The Controller should preferably be able to power all the sensors and terminals or accessories attached to it without having to need any additional power sources in the system for increased protection against lightning and possible electromagnetic interference. The controller shall be low power operation and operable in 220VAC / DC (to be generated within the controller itself).</li> <li>• IoT (Internet of Things) and M2M (Machine to Machine) connectivity: Minimum 1 Gb/s Ethernet, 300 Mb/s Wi-Fi 802.11a/b/g/n and optional worldwide HSPA+ 3G interface, remote control (http), data transfer into cloud via FTP, SSH and TML.</li> <li>• Process interface to SCADA via: Modbus RTU/TCP, SDI-12, Profibus DP, analog 0/4-20mA and relay outputs.</li> <li>• Integration of third-party sensors via analog 0/4-20 mA and digital (solid state) inputs, Modbus RTU/TCP.</li> <li>• Easily extendable: 8 slots to customize I/Os, additional software features like online data validation and event detection optional.</li> </ul>
2	Display	<ul style="list-style-type: none"> <li>• Large, color display with user-friendly buttons in all weather conditions</li> <li>• Feature enhancements by addition of specific modules.</li> </ul>
3	Power Supply	<ul style="list-style-type: none"> <li>• 10-36VDC or 100-240VAC Power Supply.</li> <li>▪ The controller should be low power consuming with consumption of less than 5W.</li> </ul>
4	Number of sensors to be connected	<ul style="list-style-type: none"> <li>• Minimum 20 Sensors to be connected</li> </ul>
5	Output Communication	<ul style="list-style-type: none"> <li>• Galvanically Separated current outputs (0/4-20 mA) that can be assigned arbitrarily.</li> <li>• USB-interface for data transfer, upgrading firmware etc.</li> </ul>

S. No.	Parameter	Specification
		<ul style="list-style-type: none"> <li>It should be possible to download the data via the USB interface an extremely fast data exchange to USB memory stick.</li> </ul>
6	Data Logger	<ul style="list-style-type: none"> <li>50000 data points or Internal integrated Data logger with minimum data memory for 5 years parameters recording &amp; logs data recoding (when 8 parameters, logged every 15 minutes)</li> <li>The controller should store the sensor configurations and calibrations and shall preferably depict the details when remotely accessed.</li> <li>The controller should have Log file to record the diagnostics.</li> <li>Data logger must have provision of a system memory (Non-volatile) to record data.</li> <li>Lifetime Free firmware update.</li> </ul>
7	Accessibility	<ul style="list-style-type: none"> <li>The system should be fully programmable with multiple levels of access control with help of Electronic-Key for data security and protection against non-authorized access to avoid any tampering or changes to the system configuration by unauthorized access.</li> </ul>
8	Status LED	<ul style="list-style-type: none"> <li>The system should have a status LED on Data logger terminal that gives reliable and fast information regarding function and status of system. And the Controller must show a LED for diagnostic purposes on the front. These LED should show diagnostic alert about normal and malfunctions of the system at a glance.</li> </ul>
9	Operating Temperature	<p>0°C to + 45 °C; Storage temperature: 0 °C to +50 °C</p>
10	Housing Material	ASA (Acrylonitrile-Styrene-Acryloester polymer)
11	Protection Rating	IP 66 or better
12	Essential features for the System	<ul style="list-style-type: none"> <li>System must have Automatic File Transfer features.</li> <li>Automatic Sampling for laboratory measurement Feature Onboard</li> <li>PLC Based basic features for process control to comply regulatory guidelines.</li> <li>System must have display unit Large, color display with user-friendly buttons in all weather conditions.</li> <li>Remote system must be protected by a user-configurable firewall.</li> </ul>

#### 4.5.12 Specifications for Display Board

S. No.	Parameter	Specification
1	Maximum Visibility Range	20 Mtrs
2	Nos of LED Text Lines	4
3	Display of Colour Element	Colour RGB,

4	Operating Temperature	Up-to 50 Deg C
5	Character Size	100mm
6	Size of the Display	10*12 feet
7	Humidity Range	0-99 %
8	Language	English
9	Colour Gradient	LED based
10	Display Mounting	Weatherproof Casing
11	Computer System	Software Compatible with Server
12	LED Matrix Per Line	64 x 128
13	Nos of character in each Line	16
14	Pitch	10mm
15	Communication	RS 485 / Analog
16	Power Supply	110V / 230VAC
17	Type of Board	Alphanumeric
18	Protection Class	IP 67

#### 4.5.13 Specifications For Radar Water Level Sensor

1. The sensor will not have drift over time.
2. Sensor will have high Performance for measurements to be unaffected by air temperature and humidity.
3. The sensor should have flat antenna design eliminates nesting areas for insects and periodic maintenance requirement.
4. The sensor should be light weight compact design facilitates easy mounting on bridges, extension mounting bracket or inside a small protective housing.
5. The sensor should have low profile design for unobtrusive appearance for urban installation sites avoid vandalism.
6. The sensor should have low power consumption for remote or solar powered sites requiring only 15 mA when active.

## Technical Specifications

S. No.	Item description	Specification
<b>Water level measurements</b>		
1	Measuring range - distance to water surface	0.4 ... 35 m
2	Resolution SDI-12 output	0.001 m
3	Sampling Rate	16 samples per second or better (16 Hz or better)
4	Accuracy (SDI-12)	0.4 ... 2.0 m: $\pm 10$ mm; 2.0 ... 30 m: $\pm 3$ mm; 30 ... 35 m: $\pm 10$ mm
5	Ave temperature coefficient (-20... +40 °C)	0.01 % full scale/10 K
6	Measurement Mode	Configurable facility for both Level Measurement and Distance measurement should be provided in the sensor.
7	Average temperature coefficient	10 ppm full scale/°C (at 20 °C)
8	Measuring time	20 s
9	Beam angle of antenna (width of beam)	12 °
10	Power supply	5.4 ... 28 V DC, typ. 12/24 V DC
11	Power consumption in active mode (at 12 V)	<15 mA
12	Power consumption in rest mode (at 12 V)	<0.05 mA
13	Interfaces	SDI-12, RS-485 (SDI-12 Protocol)
	<b>Material</b>	
14	Housing	ASA (UV-stabilized ABS)
15	Radom (front plate)	TFM PTFE
16	Mounting bracket	1.4301 (V2A)
17	Lateral axis	$\pm 90^\circ$
18	Longitudinal axis	$\pm 15^\circ$
<b>Dimensions and weight</b>		
19	Dimensions L x W x H	222 mm x 152 mm x 190 mm
20	Weight (incl. mounting bracket)	approx. 2.1 kg
21	Operating temperature:	-40 ... +60 °C
22	Storage temperature	-40 ... +85 °C

S. No.	Item description	Specification
23	Relative humidity	0 ... 100 %
24	Type of protection With horizontal mounting	IP67 (submersion depth max. 1 m; submersion duration max. 48 h)
25	EMV for low power radio devices	ETSI EN 301 489-3
26	Low-voltage device safety	EN 60950-1

#### 4.5.14 DATALOGGER

1. The Datalogger should be microprocessor based. There should be a facility to configure the Datalogger as per the requirement in the field using smartphone.
2. The design of the Datalogger should be modular and the replacement of the modules should be easy and user friendly.
3. The Datalogger should have least tuning parts (preferably none) and should provide consistent performance for at least five (05) years.
4. The Datalogger should be enclosed in a NEMA-IV enclosure.
5. All the connections from or to the Datalogger should be inside the NEMA-IV enclosure.
6. The DCP and sensors will be mounted on an 10 meter triangular tower, which should cater for fitment of assemblies for sensors, DCP, and other accessories. The tower will have multi sections. The tower should be light as well as robust enough to withstand weight of at least two persons (200 Kgs). This tower with complete accessories will be part of the supplies.
7. The complete technical manual, user manual and specially developed software's (if any) source code should be provided.
8. It should be possible to integrate the sensors of any other make with Analog/Frequency/Counter/SDI-12/RS485/RS 232 port of data logger. Company will help the users to configure the datalogger as per the requirement.

#### Technical Specifications

1. Must have built-in measurement circuitry to handle sensors commonly used.
2. Datalogger must have SDI-12 support functions.
3. Datalogger must have real-time data views and diagnostic logs.
4. Must have Python scripting functionality for complex equations, meta data calculations and data formatting.
5. Simple and intuitive software to configure the datalogger.
6. Must have single and dual point calibration methods.
7. Must have programmable measurement interval of 1.0 seconds to 24 hours.
8. Must have at least 32 number of measurements supported.
9. Datalogger must have 2 digital inputs for Wind sensor and rain gauge and 1 digital output.
10. Datalogger must have internal real-time clock with battery backup. (accuracy  $\pm 26$  sec/month (typical)).
11. Must have wide operating temperature (-40 to +70°C).
12. Datalogger should have Wi-Fi for configuration and data visualization using mobile handset.

13. Must have low-power circuitry for long-life battery operation.
14. Must have RS485, RS232, USB for interface.
15. Option of Plug and play modem cards allow for easy installation/upgrade of cellular/telecom technologies and reduced modem setup time with automatic modem recognition.
16. Must have Plug-in USB flash drive (Type A Host) for data download.
17. Must have Support for internet protocols HTTP, TCP/IP, FTP and SMS.
18. Removable Terminal Strip for powering up/down the datalogger.
19. Small datalogger footprint of dimension 11.4 x 15.8 x 4.1cm to reduce enclosure costs.

S. No.	Item description	Specification
1	Measurement Interval	1.0 second to 24 hours (programmable)
2	Measurements Supported	32
3	Analog Inputs	5 numbers (2 Single ended, 2 Differential and 1 4-20mA)
4	Digital Inputs	2
5	Digital Outputs	1
6	Additional Inputs	SDI-12 for connecting multiple sensors in a single port.
7	Excitation Channels	2 (+12V and switched +12V)
8	Communication Ports	USB Device, USB Host, RS232, RS485 and Wi-Fi
9	Operating Temperature	-40°C to +70°C
10	Memory	Flash Memory to store 10 Lakh Data Points, Expandable to 32GB
11	Power Requirements	9-20VDC
12	Current Drain	<1mA standby, <50mA active
13	Programming	Free Graphical User Interface Software to configure the datalogger and manual download of stored data.

#### 4.5.15 Specifications for a cabin shelter

S. No.	Item description	Specification
1	Size	10' x 10' x 8 ½'
2	Bottom Frame	100mm x 50mm "C" channel
3	Top Frame	50mm x 50mm MS Sq. Pipe
4	Stiffener Bottom	Bottom I beam 100 x 50, Rect MS Pipes 80mm x 40mm, Sq. MS Pipes 50mm x 50mm MS Sq. Pipe.
5	Stiffener Top	40 x 20 M.S. Sq. Pipe
6	Internal Wall paneling	GI Sheet 0.8 mm powder coated with Ribs
7	Side Post	50mm x 50mm MS Sq. Pipe
8	Side Wall Stiffeners	Specially formed 1.2 mm C.R.C. Post Section -18swg.
9	Paneling Outside	Corrugated GI sheet -1.1mm thick
10	Roof outside	CRC Sheet -1.2mm thick Properly Sloped and water tight

S. No.	Item description	Specification
11	False Ceiling	GI Sheet 0.8 mm powder coated with Ribs
12	Bottom Flooring	18mm Cement Bison Board with Vinyl Carpet of 1.0mm
13	Insulation	Glass Wool density of 32kg/m <sup>3</sup> RB glass Wool Insulation Side Wall and ceiling-50mm
14	Aluminum Windows	Size 3ftX3ft, Double Shutter Sliding Aluminium Powder Coated Windows Tinted Gray 4mm. Glass - Make Saint Goblin /ASIS With Safety Grills. Rainwater protection guard
15	Door	Made out of GI Formed sheet with inside as Bakelite sheet/ ACP 4 mm thick, locking arrangement, Hold draft, Handles etc. Rainwater protection guard.
16	Wiring	All wiring shall be concealed type & shall be Of PVC insulated copper wire (Polycab make).
17	Electrical Fittings	CFL – Philips 01 No. 01 no cabin Fan Ceiling
18	Switch sockets	VIZA/Anchor/Roma.
19	Plug points	6A –VIZA/Anchor/Roma – 01 No

#### 4.6 Quality Assurance and Control through Sensor Calibration

The Service Provider is required to perform regular calibration and adjustment of instruments using traceable standards as available.

##### 4.6.1 Calibration Frequency

- All instruments shall be calibrated at frequencies no longer than once every three months. If the instruments are not calibrated within the next quarter since the previous calibration, then any data delivered will not be taken up for validation and hence the same shall not qualify for payment. However, after the calibration is done and the same is witness by the Data Qualification Consultant, data will then be considered for validation/payment.
- To enable Data Qualification Consultant to be present for witnessing the calibration of instruments, the Service Provider shall submit quarterly schedule and method of calibration to the MPCB in advance. The schedule for calibration will be approved by MPCB and the Data Qualification Consultant will present himself for witnessing the calibration on the date, time and locations specified in the schedule. The Bidder shall share this schedule with MPCB on regular and instantaneous basis.
- Parameter validation  
Each parameter is validated with reference to standard laboratory analysis and known standards. The sample shall be collected and sent to one or more accredited lab for analysis during and the process is repeated considering the prevailing meteorological conditions and seasonal variation which must fulfill the following criteria within six (06) months of the commencement of the operation.

##### Parameter Accuracy: Allowed Variability

The relative difference between online and laboratory measurements has to be between COD Accuracy  $\pm 15\%$

BOD Accuracy  $\pm 15\%$ .  
pH Accuracy  $\pm 0.2$  pH  
TSS Accuracy  $\pm 15\%$

#### 4.6.2 Data Acquisition Systems

S. No.	Item description	Specification
1	Display	Digital Colour LCD /LED
2	Keyboard	Software Keyboard or External USB Keyboard
3	Sensor Inputs	RS 485, SDI-12 and RS232
4	Programming	Ethernet, USB
5	Local Data Retrieval	Allow local data retrieval (download) without use of a PC or other external device other than the portable storage media.
6	System Data Storage	Non-Volatile memory, Storage up to One (01) year for all the parameters with measurement interval of 15 minutes
7	Telemetry	Integrated GPRS/3G/4G /5G modem or any appropriate system compatible with Indian Telecommunication System
8	User Interface Software	Shall display Data in Graphical and tabular format for all parameters and spectral absorption curve
9	Data Transfer	TCP/IP, HTTP or FTP
10	Network Connection	Ethernet RJ45 Connector, Wi-Fi or Via Modem
11	Operating temperature	0 to 50°C
12	Operating Humidity	5 to 95 % non-condensing
13	Power Input	220 VAC / 12 VDC
14	Tampering Alert	System shall send alarms based on missing data, power supply malfunction, and door alarms.
15	SCADA Interface	4-20 mA outputs for all parameters for future integration with SCADA
16	Onsite Data Validation & Contamination alarm Software	System should contain data validation software installed for basic QA/QC of data and send contamination alert notifications to central receiving station.

#### 4.6.3 Power backup and Storage Facility

##### Sealed Maintenance Free Battery Systems

The stations shall be provided with maintenance free batteries of sufficient numbers to operate the station for 36 hours without external charge. In the event of lack of charge during the daylight hours



the data collection system shall report a fault (alarm) to the Central Data Collection System. The Bidder shall provide the calculations of load and battery capacity to justify the number of batteries and the number of hours of continuous operation.

### **Photo-Voltaic, Solar Regulator/ Battery Charging System**

The system will be provided with an external charging system. It is anticipated that there will not be external commercial power available, so the use of a solar array (or other system) will need to be considered to charge the battery system, and thus powering the station. The solar charging system shall be designed to provide charge to the system on a continuous basis, regardless of cloud cover and season. The Bidder shall provide the calculations to justify the size of the charging system (i.e., number of solar panels or other devices).

#### **4.6.4 Enclosures**

The enclosure at each RTWQMS shall accommodate data logger sensor cards, battery and regulator, transmitter unit, over voltage protection device etc. the enclosure shall provide protection from dust, humidity, precipitations, sunlight and environmental pollution. The material for the enclosure shall be suitable of protection IP 68 (NEMA 4) or better with safety lock of good quality. The enclosure shall be customized for cable entry openings or mounting bracelets for tripods or towers.

Fixed station shall require an enclosure of the Bidders choosing that will protect the equipment as well as provide both lateral and vertical movement of the sensor package. The enclosure will need to account for the instrument package as well as the charging system. Since the repair/replacement of the equipment is the responsibility of the Bidder, the Bidder will need to provide an appropriate solution for a building/enclosure.

#### **4.6.5 Specification of Software**

S. No.	Item description	Specification
1	Weatherproof Enclosure	It will be up to the Bidder to provide a well thought out design that can provide station maneuverability and flexibility as even bridge mount stations may need to be moved on an annual basis because of the changing river course during low flow period.
2	Micro-siting	Bidder will work with the client to determine the most suitable site. By no means will the client be responsible for the placement of the equipment. The client will gain the necessary permission to use the property or land needed for the station.
3	Accessories	All components needed for the station shall be included in the Bidders offer.
4	Security	The Bidder shall be responsible for replacing any equipment or infrastructure lost due to theft or vandalism, so it is important that

S. No.	Item description	Specification
		the Bidder have a well thought out plan to prevent equipment loss. In some instances, the Bidder may enlist the local security. Enclosure shall have a safety lock of good quality.

#### A. For Receiving Station (Central Receiving Station)

The Bidder will provide software to communicate between the Central Receiving Station and the remote station. The communication interface should be an easy-to-use GUI.

The Bidder will provide a database management system for storage of both raw and validated data and both data sets will be accessible through the intranet/internet, through the web server. The database will be Postgrad SQL, SQL Server, or similar.

The Bidder will provide time series analysis software for the quality control of posted water quality measurements. The software shall write the corrected values to the database. The data base shall keep the original data as well as the corrected data. Both data sets shall be accessible through the Web Server.

#### B. Software Management

1. Software capable for requesting, downloading, editing, processing and representation and management of data.
2. The software integrates the entire data request commands made to the stations in real time data or data saved in the memory.
3. Software allows the user to change and/or modify the configuration of the stations, enables to perform tasks such as date and time synchronization with the computer and adds new measuring channels specifying the different sampling and storage periods, as well as the statistical calculations to be stored.

#### Window for enquiry and configuration of monitoring station

1. Name, number and abbreviation of the station
2. Location, Latitude, Longitude coordinates
3. Connection type and telephone, if any.
4. Configuration of channels, parameter and calculations
5. Photography which represents the actual station (“Associate image”)

#### Hands on Operations

The following station parameters must be configurable for each station.

1. Station co-ordinates
2. Allow the Setting of Date/Time of the station.
3. Real time data request from each channel.
4. Downloading of data stored in the station.
5. Downloading the station’s configuration of PC

6. Downloading of PC's configuration to the stations
7. Updating the station's Firmware

### **Data Analysis**

1. Data enquiry over several days
2. Comparison of readings between stations
3. Daily statistics enquiry
4. Strip charts of the daily statistics.
5. Comparison between the daily statistics of various stations
6. Comparison between parameters from the same station or from different stations

### **Visualization of Data**

1. Enquiry of data in table form
2. Enquiry of data in graph form
3. Enquiry of data in map form
4. Enquiry of picture of remote data station
5. Enquiry of Maintenance activities selectable by station and period of time
6. Temporary graphs composition window

### **Additional Features**

1. Printing of various reports and graphs like inter parameter comparison, Intra parameter comparison, comparison of data from other stations, etc.
2. Zoom in and zoom out facility with automatic graph scale Resizing Registers all the events like Information messages, error messages
3. Information of the communications resources used by the PC at that moment.
4. Exportation of readings to text files (.txt) in CSV format and MS-EXCEL.

## **C. WEB PLATFORM**

1. The Web Software Platform must be able for web posting of the data available on the central server at MPCB Headquarters Sion, in such a way that all authorized persons with an internet connection (ADSL) would have the possibility to access to the information of the river water quality monitoring terminal. The user can customize the way to display up to ten parameters. The user can play the role as administrator and define other user's access rights. Considering data transmission from the remote terminals to the Central Server is carried out via GPRS /GSM cellular network, data can be updated, for example, every 5 minutes or 10 minutes, or 15 minutes, as programmed by the PPCB Officials. The Web Enabled Software must have following features:
  2. Only authorized users can access the web enabled data
  3. The format for administrator for issue of user id and password should be provided.
  4. Log of user accessing the web enabled data with complete detail of data accessed and downloaded should be maintained.

5. The authorized user should have access to current data and historical data.
6. User should have provision for full graphical plotting of the time series of the data and comparison of data from historical data of the station.
7. In graphical representation should have full attributes, which should be displayed by positioning cursor on the map.
8. The monitoring station by clicking on the map must show the geographical information and status of the station, for example Name of station, Station ID, Latitude, Longitude, Height (msl) etc.
9. On selecting monitoring station, the complete menu of the data should be displayed.
10. Data can be selected both in Tabular and graphical format.
11. The graphical display for all parameters should be available.
12. The graphical plot of water quality data analysis is available for the user.
13. Links to perform data downloads for any period of record, by station, sensor, or group of sensors.

#### 4.6.6 Specification of CLOUD

##### Hardware Requirements (Application and Web Server)

1. Intel Xeon Processor – 2 Core or above
2. 64 Bit System
3. 32 GB RAM. In case Camera is to be setup the RAM has to be 2X.
4. 200 GB Hard Disk
5. Firewall Enabled with Access to Port 80 / 443 (for HTTPS) & 3389 (For Remote Desktop)
6. RAID Level 1 to be implemented.
7. UPS Power Backup for Servers

##### Software Requirements

###### Application Server

1. Windows 2012 Server or above
2. SQL Server 2012 Standard Edition or above or Postgre SQL Server
3. .NET Framework 4.6.1 or above
4. Internet Information Services

###### Web Server

1. Windows 2012 Server or above
2. Internet Information Services
3. .NET Framework 4.6.1 or above

Following is the detailed list of activities / services to be undertaken / provided by the successful bidder.

#### 1. Supply of Equipment at designated Locations

- i. **Packaging:** The equipment should be delivered within the given timeframe at specified offices in new and perfect condition and no damage or repair in transit shall be accepted. Necessary packing, if any, shall be provided by the supplier/Bidder at his own cost.
  - ii. **Conformity to Specifications:** The product supplied should fully conform to the purchase specification as quoted in the Bid. Such conformity of the material to the specifications shall be determined by testing the product/material as specified in the RFP Document and the response given in the Bid. The Factory Test Report before the dispatch of the equipment to the site will be the document for the record and conformity test. The Successful Bidder shall be solely responsible for the quality of the material delivered until the same is tested and accepted by the Board.  
In the event the material delivered is found to be not in accordance with the specifications or desired performance, the entire quantity/consignment will be rejected, and the Bidder will be responsible for replacement of the rejected material free of cost and / or reimbursing the MPCB for resultant losses sustained on this account.
  - iii. **Insurance:** The Successful Bidder at their own cost will insure the equipment for the period of Contract (3+2) along with its accessories and attachments against all threats and name Maharashtra Pollution Control Board as the beneficiary. In case of any claims, the Successful Bidder will help the Board by providing all the necessary information to complete the process for speedy claim settlement.
  - iv. **Costs associated:** All costs towards delivering of the equipment at each of the sites would be to the Successful Bidder's account and hence the Bidders are required to quote the prices inclusive all such cost heads. Such cost heads can be but not limited to transport, weather-proof packing, transit insurance, Insurance, Registration, local levies, etc.
- 2. Commissioning of Equipment at site and Demonstration to MPCB / Nodal Officer**  
The Successful Bidder will assemble each of the machines at respective locations in presence of the Nodal Officer/s. All the necessary attachments and accessories also will be attached to the equipment. A full functional demonstration of the individual machine will be given to the respective Nodal officer/s showing them the key functional capabilities of the machines. Upon successful demonstration of the machine, MPCB will issue the Certificate of Operation (CoOP) to the Successful Bidder. The date of issue of CoOP will be considered as the date of start of the warranty period and the last date of that will be considered as the start date of the two (02) year comprehensive AMC period for the Successful Bidder.
- 3. Comprehensive Annual Maintenance Contract (CAMC)**  
The Successful Bidder will provide Comprehensive Annual Maintenance Contract (CAMC) services for two years. The Comprehensive Annual Maintenance Contract component of this contract is of very critical nature which has to be carried out periodically. The Successful Bidder is therefore sensitized to the need for proper planning, deployment and Maintenance throughout the period of contract (3 years +2).  
Comprehensive AMC will cover following points:

- i. Regular Schedule maintenance of the machine is covered along with consumables and service cost
- ii. Consumables covered – Engine oil, Hydraulic oil, Chain Case oil, all filters required for the equipment at scheduled service.
- iii. Scheduled quarterly training to operators appointed by MPCB/ respective ULBs.

The Successful Bidder is required to attach importance to the following points so as to ensure deliverance of the highest quality of works which will ensure

- a) Availability of entire fleet of brand-new machines from same OEM,
- b) Reduce down-time due to repairs,
- c) Reduce drastically expenditure on Break-down and repair maintenance.
- a) *Period:* The successful Bidder will supply Real Time Water Quality Monitoring machines & provide CAMC services for a period of two (02) years from the date of issue of CoOP.
- b) *Emergency Situations:* During emergency situation, the Successful Bidder will be required to render services as mentioned in RFP till such time until the situation is normalized. No extra payment will be made to the Successful Bidder on account of such emergency services.
- c) *Operator's Training:* The successful Bidder will provide training to the operators appointed by respective local authorities/ MPCB/ Nodal Officer to operate the equipment on respective .
- d) *Comprehensive Maintenance Schedule:* The Successful Bidder will prepare comprehensive AMC schedule for equipment detailing the Preventive Maintenance Schedule on discussion with the MPCB/ULBs, a) Weekly c) Monthly d) Half-Yearly e) Yearly, which shall be strictly complied during the contract period.
- e) *Maintenance tools and mechanics:* The Successful Bidder will deploy trained and skilled mechanics on site to conduct all maintenance activities. All necessary tools to conduct routine maintenance activities at site, such as but not limited to, necessary Hand Tools, Special Tools, Servicing and Lubricating equipment etc. will be provisioned for, at respective site defined in RFP.
- f) *Preventive maintenance:* The Successful Bidder will carry out preventive maintenance on a monthly/quarterly/half yearly/yearly, basis discussion with the MPCB/ULBs. The preventive maintenance will include but will not be restricted to the replacement of consumables, like Filter replacement / filtration of oil etc. The preventive maintenance shall be carried out in a required sequence for which, trained personnel shall be appointed who are fully conversant with operation and maintenance of the machines.
- g) *Maintenance and Attendance Logs:* The successful Bidder will keep log of Maintenance logs. All such logs should be made available for inspection whenever called for.
- h) *Safety and Security:* It is the utmost responsibility of the Successful Bidder to ensure adherence to Safety Norms in all aspects of the works especially while the equipment is in the rivers and while carrying repairs/maintenance activities. Any damage, repair, liability, loss of reputation, both to men and material shall be entirely responsibility of the Bidder. MPCB will not be responsible for any human accident or hazard if occurred to the person of the Successful Bidder while carrying out the work and will indemnify MPCB against any such untoward incidences / accidents.

- i) **Reporting:** The Successful Bidder shall submit the computerized summary of the details of CAMC every month to the Nodal Officer. Other review and reporting parameters and frequency will be mutually decided between MPCB and the Successful Bidder and will be adhered to by the Successful Bidder.
- j) **All Inclusive CAMC:** The Bidders should carefully read the CAMC scope mentioned above and quote a price inclusive of all such and other incidental costs as may be envisaged. No extra charges, other than those quoted for CAMC will be paid to the Successful Bidder.
- k) **Warranty and On-site:** The warranty will be provided on comprehensive basis, meaning all parts excepts for the consumables and parts under normal wear and tear, will be included under the warranty.  
In case of any faults or breakdown of these parts will be replaced free of cost by the Successful Bidder. The repairs will be done on site. In case of major repairs, where the equipment needs to be carried off-site to the Service Centre, the Successful Bidder will provide stand-by equipment of similar capacity and capability.
- l) **Breakdown Maintenance:** Successful Bidder will promptly attend to any breakdown calls and resolve them expeditiously as per SLA mentioned in RFP. If the Successful Bidder fails to meet the uptime requirement of MPCB, it will levy penalties as per provisions in this RFP. MPCB shall give Notice to the Supplier stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. MPCB shall afford all reasonable opportunity for the Supplier to inspect such defects. Upon receipt of such Notice, the Supplier shall, within the decided period, expeditiously repair or replace the defective Goods or parts thereof, at no cost to MPCB. If having been notified, the Supplier fails to remedy the defect within the specified period; MPCB may proceed to take within a reasonable period such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which MPCB may have against the Successful Bidder under the Contract. Certificate to be obtained from the nodal / respective officer from MPCB by bidder after each preventive maintenance of respective site.

#### 4.7 Locations for installations

1. The detailed locations with the address along each river stretch is provided in **Annexure 24**
2. In the first phase of the project, 10 RTWQMS will be installed in the locations of Priority 1, 2 and 3 rivers.
3. The exact locations of the 10 stations are to be decided within 15-20 days after award of the contract, by the successful bidder in consultation with MPCB officials after site visits.

Priority wise list of Rivers on data of (Jan 2023-Dec 2023)		
Priority I BOD above 30mg/l (3 Nos.)	Priority II BOD 20-30 mg/l (2 Nos.)	Priority III BOD 10-20 mg/l (5 Nos.)
Mithi	Bhima,	Godavari, Indrayani
Pawana	Mula,	Kundalika, Nira, Panchaganga
Mutha		

#### 4.8 MPCB Responsibilities

As the Project Sponsor, Maharashtra Pollution Control Board will have following responsibilities towards the project.

1. Identification of the location for installation of the analyzers and other necessary equipment.
2. Permission from concerned authorities for access / installation of the analyzers and necessary hardware.
3. Permission from concerned authorities to erect any structure required for housing the analyzers and its accessories at the respective locations.
4. Appointing Nodal Officer/s for coordinating all the activities with the Successful Bidder and / or external agencies, as the case may be.
5. Acceptance of the equipment/ machine delivered and issue of CoOP after first demonstration.
6. Conducting regular reviews with the Successful Bidder.

#### 4.9 Initial Delivery and Final Handover

1. Initial Machinery Delivery
2. No Service issues should be pending at the time of delivery.
  - a. A working demonstration will be given to the designated office / Nodal Officer.
  - b. All technical manuals, service books should also be delivered.
3. Final Handover-At the end of the three (03) years and (03) three months from the date of LOA/ LOI: At the end of comprehensive AMC period as per Contract period (or in case of extension thereof, if any), the Successful Bidder will transfer the maintenance responsibilities to MPCB/ any new vendor duly appointed. The following points needs to be noted in this regard:
  - a. The equipment will be handed over in good working condition after a full servicing of the equipment not earlier than One (01) month before the handover. No Service issues should be pending at the time of handover.
  - b. A working demonstration will be given to MPCB / Designated agency.
  - c. All the logs towards the maintenance of the equipment of warranty period should be handed over to the Nodal Officer. All technical manuals, service books should also be handed over.
  - d. A sign-off should be taken from the accepting Nodal Officer /ULBs/ designated agency, indicating the transfer of all maintenance activities to MPCB / Designated agency from the specified date with “No Issues Pending” Certificate.
  - e. All technical manuals, service books should also be delivered.



#### 4.10 Delivery Schedule:

Broad phases of Project along with their respective timelines are mentioned herewith. The successful Bidders have to comply with these timelines. Failure to adhere to the timelines will attract penalties.

S. No.	Activities	Project Timelines
1	Supply of Equipments at respective sites as intimated by MPCB	<ul style="list-style-type: none"> <li>▪ Within Three (03) months from the date of acceptance of LOA</li> <li>▪ Attachments order and PO will be generated separately.</li> <li>▪ Bidder shall deliver attachments Not more than fifteen (15) days from date of PO</li> </ul>
2	Successful demonstration of respective machines to MPCB / Designated Local Office. Receive Certificate of Operation (CoOP) from MPCB	Within Fifteen (15) days from the date of supply at respective sites as intimated by MPCB a
3	Installation of the analysers and building the station at respective identified locations	Within three (03) months after site clearance is sanctioned / provided with required site permission from the date acceptance of Letter of Intent/ Award by the Bidder
4	Comprehensive AMC, On-site support	Starting from the date of issue of CoOP for a period of two (02) years (including warranty period)

*Note: The above timeframe must be adhered so that MPCB can plan their supporting / associated activities of the project.*

1. *The bidder must have experience of supply, installation and commissioning of titanium based real time water quality monitoring stations for rivers for at least 8 parameters i.e pH, BOD, COD, TSS, Turbidity, Dissolved Oxygen, Nitrate and Ammonia.*
2. *The bidder must provide Country of Origin certificate at the time of supply.*
3. *The offered instrument shall have proven track record of rive monitoring In India/ globally.*

#### 4.11 Warranty

The RTWQMS shall be under warranty for one year from the date of CoOP given by MPCB. The details of terms and conditions and scope of work during CAMC are specified separately, However, the Bidder shall warrant to the Board that the Equipment to be supplied under the Contract is new, unused, of the most recent or current models, and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. This

warranty includes all spare parts and services to keep the instruments and equipment in operating condition.

The Bidder shall further warrant to MPCB that the Equipment complies strictly with the Specifications and has no defect, arising from design, materials, or workmanship or from any act or omission of the Bidder that may develop under normal use of the supplied Equipment in the conditions prevailing to the final site.

#### **Period of CAMC Contract**

The Bidder shall carry out Comprehensive Operation & Maintenance Contract of River Water Quality Monitoring Stations for a period of 2 years post warranty period of the respective station subject to satisfactory performance.

#### **In Case of Faulty Equipment**

If any part of the Equipment breakdowns or fails due to faulty or improper design, materials, workmanship, manufacture, fabrications, or instructions, or fails to meet the requirements of the Specifications, then the Bidder or his O&M partner shall promptly notify the manufacturer in writing of any claims arising under this clause

## SECTION 5: PAYMENT TERMS

### 5.1 Payment Terms

The following payment terms will be offered to the Successful Bidder upon completing the necessary formalities and rendering deliverables as mentioned in Section of Scope of Work and delivery schedule:

- i. No advance payment shall be made by MPCB at the time of signing of Contract with the Supplier
- ii. The payment of scope items shall be released by MPCB based as mentioned below:

S. No.	Milestones	Payment (%) (Incl. GST)
	<b>Part I – Equipment Cost</b>	
1.	Upon completion of the deliveries of all the equipment at respective sites and Upon issuance of CoOP certificate to the Successful Bidder	90% of total amount quoted
2.	Upon trouble free and satisfactory working of the equipment (s) at site for a period of Thirty (30) days, from the date of issue of CoOP	Balance 10% of total amount quoted
	<b>Part II – CAMC</b>	
1.	Comprehensive AMC (including warranty period of Two (02) year)	Four (04) equal instalments at the end of each quarter of maintenance

- i. Capital expenditure payment will be released by MPCB for the delivery of machinery integrated vehicles upto issuance of Certificate of Operation (CoOP) and warranty. MPCB intimated authority will release the payment during extended service period based on the extended contract if any.
- ii. The extended service requirement and period shall be finalized with the respective authority and should begin after the warranty period of one year. The payments during the extended period (if extended after 1 year warranty) for the scope item shall be released by MPCB intimated authority on a mutually discussed and agreed frequency between the successful bidder and MPCB intimated authority.
- iii. Within 15 (fifteen) days of MPCB issuing the LoI / LoA / Work Order, the Successful Bidder, at its cost, charges and expenses will submit a PBG for an amount equivalent to as mentioned in this document. The PBG shall be in the form of a guarantee/s of a Nationalised/scheduled Bank acceptable to MPCB and shall be valid for the tenure mentioned in document.

- iv. All the payments at each stage will be made after deducting penalties with applicable GST for the stage, if applicable. The penalties applicable at various stages are mentioned in this document.
- v. All payments will be made vide a crossed cheque payable in Mumbai / online through NEFT/RTGS, within 30 days of submission of invoice, after deducting applicable TDS, if any.
- vi. Certificate must be provided by the successful bidder from the respective ULBs after each preventive maintenance period of respective site and the same should be attached with as part of invoice to MPCB for quarterly payment disbursement

## 5.2 Other Terms and Conditions

1. In case of a dispute on the invoice amount, or any other payment related matter; such matter shall be discussed with MPCB and/ or any other authority designated by the Nodal, MPCB. In such cases, the Successful Bidder, shall produce requisite supporting documents, communications, acknowledgement of MPCB, etc. to support the disputed Invoice amount, or any other payment related matter; however, the decision of the Nodal, MPCB in this matter shall be considered as final.
2. Any dispute or difference or claim arising out of or in relation to the terms of the RFP, will be settled by reaching a mutual understanding and amicable settlement between the parties.

## SECTION 6: KPI and Penalty

### 6.1 Penalties / SLAs

The date of delivery of the services stipulated in the acceptance of Work Order / LoI /LoA shall be the essence of the contract and delivery shall be completed no later than the dates specified therein. Extension of time shall only be granted if MPCB is convinced about the cause stated by the Successful Bidder, or the cause of the delay is not in the control of the Successful Bidder.

S. No.	Penalty Type	Penalty Description	Penalty Amount
1	Delivery	Delay in delivery of the equipment. (Three (03) months from LoA)	01% (One Percent) of the equipment value per machine for the delay of each week or part thereof
2	Commissioning	Delay in obtaining CoOP (Fifteen (15) days from delivery)	INR 5,000/- (Five thousand only) per day of delay per machine
3	Breakdown Response (Response time to breakdown repair after Incident notification)	Repair of machine and its Equipment's to fully working condition within 48 hours from date and time of notification. Any delay in repair beyond 48 hours will attract per day penalty	INR 10,000 /- (Ten thousand only) per day of delay in repair of machine and it's Equipment's

Note:

- MPCB shall recover penalties/liquidated damages at first instance from the amount due to the Successful Bidder in the billing month, then the invoices of the subsequent month and thereafter, from the Performance Security furnished by the Successful Bidder.
- These penalties will be monitored and deducted for the entire Contract Period on a monthly basis. KPI adherence will be monitored on monthly basis by MPCB designated Nodal or authorized officer(s) or representative and/ or any third party and, also with incorporation of feedback from the officials.
- The maximum monthly penalty that maybe imposed on the Successful Bidder shall be capped at 10% (ten per cent) of the total billing amount. After 10% of penalty, annulment of the contract shall be initiated.
- Shortfall/Default shall refer to and include but not limited to any incidents, action, omission, wrongdoing etc. that is in contravention to the service requirements/performance parameters and any other terms and conditions to be fulfilled by the Successful Bidder.

## SECTION 7: GENERAL CONDITIONS OF THE CONTRACT

### 7.1 General Guidelines

1. It is presumed that the Bidder has carefully studied all condition before quoting.
2. If the Bidder has any doubts, whatsoever, as to the contents of the contract he is deemed to have in good time i.e., before submitting his tender, get his doubts clarified authoritatively from the Contact Person in writing. Once the tender is submitted by Bidder, the matter will be decided according to the tender conditions.
3. No extra claims shall be accepted as regards specifications, infrastructure, royalties etc.

### 7.2 Interpretation

In this Contract unless a contrary intention is evident:

1. The clause headings are for convenient reference only and do not form part of this Contract.
2. Unless otherwise specified a reference to a clause number is a reference to all of its sub-clauses.
3. Unless otherwise specified a reference to a clause, sub-clause or section is a reference to a clause, sub-clause or section of this Contract including any amendments or modifications to the same from time to time.
4. A word in the singular includes the plural and a word in the plural includes the singular.
5. A word importing a gender includes any other gender.
6. A reference to a person includes a partnership and a body corporate.
7. A reference to legislation includes legislation repealing, replacing, or amending that legislation.
8. Where a word or phrase is given a particular meaning, it includes the appropriate grammatical forms of that word or phrase which have corresponding meanings.
9. In the event of an inconsistency between the terms of this Contract and the Tender and the Bid, the terms hereof shall prevail.

### 7.3 Key Performance Measurements

1. Unless specified by the bidder to the contrary, the Successful Bidder agency shall supply the machines and perform the Services and carry out the Scope of Work in accordance with the terms of this Contract, and the Service Specifications as laid down under Service Level Agreement.
2. If the Contract / Service Specification include more than one document, then unless the MPCB specifies to the contrary, the later in time shall prevail over a document of earlier date to the extent of any inconsistency.
3. The MPCB reserves the right to amend any of the terms and conditions in relation to the Contract / Services and may issue any such directions which are not necessarily stipulated therein if it deems necessary for the fulfilment of the scope of work.

## 7.4 Commencement & Progress

The Successful Bidder shall commence the performance of its obligations in a manner as specified in the Scope of Work.

1. The Bidder shall proceed to carry out the activities / services with diligence and expedition in accordance with any stipulation as to the time, manner, mode, and method of execution contained in this Contract.
2. The Bidder shall be responsible for and shall ensure that all activities / services are performed in accordance with the Contract, Scope of Work and that the Bidder's Team complies with such specifications and all other standards, terms and other stipulations/conditions set out hereunder.
3. The Bidder shall perform the activities / services and carry out its obligations under the Contract with due diligence and efficiency. The Successful Bidder shall always act, in respect of any matter relating to this Contract, as faithful advisors to the MPCB and shall, at all times, support and safeguard the MPCB's legitimate interests in any dealings with Third parties.

## 7.5 Trademarks, Publicity

Neither Party may use the trademarks of the other Party without the prior written consent of the other Party. Neither Party shall publish nor permit to publish either along with or in conjunction with any other person any press release, information, article, photograph, illustration, or any other material of whatever kind relating to this Agreement, the SLA, or the business of the Parties without prior reference to and approval in writing from the other Party.

## 7.6 Confidentiality

Information relating to the examination, clarification, evaluation, and recommendation for the bidders shall not be disclosed to any person who is not officially concerned with the process or is not a retained professional advisor advising MPCB in relation to, or matters arising out of, or concerning the bidding process. MPCB will treat all information submitted as part of the bid in confidence and will require all those who have access to such material to treat the same in confidence. MPCB may not divulge any such information unless it is directed to do so by any statutory entity that has the power under law to require its disclosure or is to enforce or assert any right or privilege of the statutory entity and/ or MPCB or as may be required by law or in connection with any legal process.

## 7.7 Ethics

Successful Bidder represents, warrants, and covenants that it has given no commitments, payments, gifts, kickbacks, lavish or expensive entertainment, or other things of value to any employee or Board, or its nominated agencies in connection with this RFP and acknowledges that the giving of any such payment, gifts, entertainment, or other things of value is strictly in violation of MPCB's standard policies and may result in cancellation of this Agreement.

## 7.8 MPCB's Obligations

1. MPCB nominated representative shall act as the nodal point for implementation of the Contract and for issuing necessary instructions, approvals, commissioning, acceptance certificates, payments etc. to the Bidder.
2. MPCB shall ensure that timely approval is provided to the Successful Bidder as and when required, which may include approval of project plans, implementation methodology, design documents, specifications, or any other document necessary in fulfilment of this contract.
3. MPCB's representative shall interface with the Successful Bidder, to provide the required information, clarifications, and to resolve any issues as may arise during the execution of the Contract. MPCB shall provide adequate cooperation in providing details, coordinating, and obtaining of approvals from various governmental agencies, in cases, where the intervention of the Employer is proper and necessary.
4. MPCB may provide on Successful Bidder's request, particulars/information/ or documentation that may be required by the Successful Bidder for proper planning and execution of work and for providing services covered under this contract and for which the Successful Bidder may have to coordinate with respective vendors.
5. MPCB may provide to the Successful Bidder, sitting space and basic infrastructure at their office location whenever required.

## 7.9 Default and Termination

### 7.9.1 Events of default by the Successful Bidder

The failure on the part of the Successful Bidder to perform any of its obligations or comply with any of the terms of this Contract shall constitute an Event of Default on the part of the Successful Bidder. The events of default as mentioned above may include inter-alia the following:

1. The Successful Bidder or its team has failed to perform any instructions or directives issued by the Employer which it deems proper and necessary to execute the scope of work or provide services under the Contract, or.
2. The Successful Bidder or its team has failed to confirm / adhere to any of the key performance indicators as laid down in the Key Performance Measures / Service Level Agreements, or if the Successful Bidder has fallen short of matching such standards / benchmarks / targets as the Employer may have designated with respect to the system or any goods, task or service, necessary for the execution of the scope of work and performance of services under this Contract. The above-mentioned failure on the part of the Successful Bidder may be in terms of failure to adhere to performance, quality, timelines, specifications, requirements, or any other criteria as defined by the Employer.
3. The Successful Bidder has failed to remedy a defect or failure to perform its obligations in accordance with the specifications issued by the Employer, despite being served with a default notice which laid down the specific deviance on the part of the Successful Bidder's team to comply with any stipulations or standards as laid down by the Employer; or



4. The Successful Bidder's team has failed to adhere to any amended direction, instruction, modification, or clarification as issued by the Employer during the term of this Contract and which the Employer deems proper and necessary for the execution of the scope of work under this Contract.
5. The Successful Bidder's Team has failed to demonstrate or sustain any representation or warranty made by it in this Contract, with respect to any of the terms of its Bid, the Tender, and this Contract.
6. There is a proceeding for bankruptcy, insolvency, winding up or there is an appointment of receiver, liquidator, assignee, or similar official against or in relation to the Successful Bidder.
7. The Successful Bidder's Team has failed to comply with or is in breach or contravention of any applicable laws.
8. The Successful Bidder's team are involved in fraud/wilful misconduct.
9. Where there has been an occurrence of such defaults inter alia as stated above, the Employer shall issue a notice of default to the Successful Bidder, setting out specific defaults / deviances / omissions / non-compliances / non-performances and providing a notice of Sixty (60) days to enable such defaulting party to remedy the default committed.
10. Where despite the issuance of a default notice to the Successful Bidder by the Employer the Successful Bidder fails to remedy the default to the satisfaction of the Successful Bidder, the Employer may, where it deems fit, issue to the defaulting party another default notice or proceed to adopt such remedies as may be available to the Employer.

### **7.9.2 Consequences of Default**

Where an Event of Default subsists or remains uncured, the Employer shall be entitled to:

1. Impose any such obligations and conditions and issue any clarifications as may be necessary to inter alia ensure smooth continuation of project and the Services which the Bidder shall be obliged to comply with which may include re-determination of the consideration payable to the Successful Bidder. The Successful Bidder shall in addition take all available steps to minimize loss resulting from such event of default.
2. Suspend all payments to the Successful Bidder under the Contract by a written notice of suspension to the Successful Bidder, provided that such notice of suspension:
  - a. Shall specify the nature of the failure; and
  - b. Shall request the bidder to remedy such failure within a specified period from the date of receipt of such notice of suspension by the Successful Bidder.

Any decision taken by Hon'ble Member Secretary, MPCB shall be final and binding on the Successful Bidder.

## 7.10 Audit, Access, and Reporting

### 1. Purpose

- a) This section details the audit, access, and reporting rights of MPCB and the respective obligations of Successful Bidder under the contractual terms of Project Implementation, Operation and SLA Management.
- b) MPCB may engage a suitable, neutral, and technically competent third-party agency or agencies for conducting audit and certification, upon intimation by the Successful Bidder that the system implementation is complete.
- c) The Bidder being notified of any deviations from the agencies nominated by Employer regarding deviations from norms, standards or guidelines shall at the earliest instance, take all corrective measures required in least possible time.
- d) All the cost for third party agencies will be borne by the Successful Bidder.

### 2. Notice and Timing

- a) As soon as reasonably practicable after the Effective Date, the Parties shall use their best endeavours to agree to a timetable for routine audits during the Project Implementation Phase and the Operation and Management Phase in accordance with such agreed timetable and shall not be required to give the Successful Bidder any further notice of carrying out such audits. The cost of third-party audits has to be borne by the Successful Bidder.
- b) The MPCB or its nominated agencies may conduct non-timetabled audits at its own discretion if they reasonably believe that such non-timetabled audits are necessary as a result of an act of fraud by the Bidder, a security violation, or breach of confidentiality obligations by the Bidder, provided that the requirement for such an audit is notified in writing to the Bidder a reasonable period time prior to the audit (taking into account the circumstances giving rise to the reasonable belief) stating in a reasonable level of detail, the reasons for the requirement and the alleged facts on which the requirement is based. If the Bidder considers that the non-timetabled audit was not appropriate, the matter shall be referred to the escalation procedure.
- c) The frequency of audits shall be decided by MPCB.
- d) In addition to the above, there will be audits conducted by statutory bodies (e.g., CAG) as and when they are required to do it. Notwithstanding any condition given in the contract, the Bidder will have to provide these statutory bodies access to all the facilities, infrastructure, documents, and artefacts of the Project as required by them and approved by MPCB, in writing.
- e) The audit and access rights contained shall survive the termination or expiration of the Agreement.

### 3. Access

- a) The Successful Bidder shall provide MPCB access to documents, records and systems reasonably required for audit and shall provide all such persons with routine assistance in connection with the audits and inspections.

- b) MPCB shall have the right to copy and retain copies of any relevant records. The Successful Bidder shall co- operate with MPCB in effecting the audits and providing necessary information.

### **7.11 Indemnity**

The Successful Bidder shall indemnify the MPCB against the all actions, suits, claims, damages and demands brought or made against him in respect of anything done or omitted to be done by the Successful Bidder in the execution of or in the connection with the work of this Contract and against lose or damage to the MPCB in consequences of any action or suit being brought against the contractor anything done or omitted to be done in execution of the work of this contract.

### **7.12 Corrupt or Fraudulent Practices**

MPCB requires that Successful Bidder under contracts, observe the highest standard of ethics during the supply and execution of such contracts. In pursuance of this policy MPCB.

Defines, for the purposes of this provision, the terms set forth below as follows:

- “Corrupt practice” means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
- “Fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract.
- Will reject a proposal for award if it determines that the bidder recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.
- Will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded a contract if it any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a contract.

### **7.13 Jurisdiction of Courts**

In case of any claim, dispute or difference rising in respect of the contract, the case of action there of shall be deemed to have arisen in Mumbai and all legal proceedings in respect of any such claim, dispute or difference shall be instituted in competent court in the city of Mumbai only.

### **7.14 License**

The Successful Bidder shall have to bear Hardware /Software license/Royalty cost, if any for fulfilment of the contract.

## 7.15 Risk and Cost

- In case, the Bidder fails to deliver the quantity of resources / services as mentioned in the RFP, MPCB reserves right to procure same or similar material from alternate sources at risk, cost and responsibility of the contractor.
- If it is observed that the Contractors carrying out the work fails to comply with instructions given by the MPCB authorities during execution of work twice, the work will be carried out at the risk and cost of the contract and penal action will be taken against them. The above condition will be in addition to the relevant condition in General Conditions of the Contract regarding cancellation of full or part of the work, finality of the decision of the disputes, differences or claims raised by the contractors relating to any matter arising out of the Contract.

## 7.16 Conflict of Interest

Successful Bidder shall furnish an affirmative statement as to the absence of, actual or potential conflict of interest on the part of the Applicant or any prospective subcontractor due to prior, current, or proposed contracts, engagements, or affiliations with MPCB. Additionally, such disclosure shall address any and all potential elements (time frame for service delivery, resource, financial or other) that would adversely impact the ability of the Successful Bidder to complete the requirements as given in the application document.

## 7.17 Confidentiality

- The Successful Bidder will be exposed, by virtue of the agreed activities as per the application document, to internal business information of MPCB and other Government Departments. The Bidder would be required to provide an undertaking that they will not use or pass to anybody the data/information derived from the project in any form. The Successful Bidder must safeguard the confidentiality of the MPCB's and Government Department's business information, applications, and data. For this, Bidder is required to sign non-disclosure agreement with MPCB.
- Disclosure of any part of the afore mentioned information to parties not directly involved in providing the services requested, unless required to do so by the Court of Law within India or other Statutory Authorities of Indian Government, could result in premature termination of the contract. The MPCB may apart from blacklisting the Successful Bidder, initiate legal action against the Successful Bidder for breach of trust. The Successful Bidder shall also not make any news release, public announcements or any other reference on application document or contract agreement without obtaining prior written consent from the MPCB.
- Bidder shall use reasonable care to protect confidential information from unauthorised disclosure and use.

## 7.18 Arbitration

If, due to unforeseen reasons, problems arise during the progress of the contract/project execution leading to disagreement between the MPCB and the Successful Bidder, the latter shall first try to resolve the same amicably by mutual consultation. If the parties fail to resolve the dispute through the two-Tier Committee formed by MPCB, the dispute/claim etc. relating to the contract/engagement shall be referred to the Hon'ble Member Secretary of MPCB whose decision shall be final and binding on both the parties.

### 7.18.1 Handling of Bidder Grievances/Dispute Resolution

1. To look after the grievances of the Bidder, MPCB shall form a three-tier Committee comprising of:
  - Tier 1 Committee – Regional Officer, Sub-Regional Officer, AAO/Head Accountant
  - Tier 2 (EB dept.): Administrative Officer, Chief Accounts Officers, Law Officer/Office Superintendent
  - Tier 3 Committee - Member Secretary
2. All grievances, clarifications shall be addressed to Tier 1 Committee first. In case of no satisfactory resolution, it shall be passed on to Tier 2 Committee.
3. In case no satisfactory resolution is received by the Successful Bidder through the Tier 2 Committee, the matter shall be taken up with Hon'ble Member Secretary, MPCB. The decision of Hon'ble Member Secretary in this regard shall be final and binding.

### 7.18.2 Governing law and Jurisdiction

This contract Award and any dispute arising from it, whether contractual or non-contractual, will be governed by laws of India and subject to arbitration clause, be subject to the exclusive jurisdiction of the competent courts of Mumbai, India.

## 7.19 Limitation of Liability

1. The liability of Successful Bidder (whether in contract, tort, negligence, strict liability in tort, by statute or otherwise) for any claim in any manner related to the Agreement, including the work, deliverables or Services covered by the Agreement, shall be the payment of direct damages only which shall in no event in the aggregate exceed the total contract value (contract with the Government Department). The liability cap given under this Clause shall not be applicable to the indemnification obligations.
2. In no event shall either party be liable for any consequential, incidental, indirect, special, or punitive damage, loss, or expenses (including but not limited to business interruption, lost business, lost profits, or lost savings) even if it has been advised of their possible existence.
3. The allocations of liability in this clause represent the agreed and bargained-for understanding of the parties and compensation for the Services reflects such allocations. Each Party has a duty to mitigate the damages and any amounts payable under an indemnity that would otherwise be

recoverable from the other Party pursuant to the Contract Award by taking appropriate and commercially reasonable actions to reduce or limit the amount of such damages or amounts.

## 7.20 Variation in Agreement Quantity & its Payment

1. Modification to Contract to be in writing: In the event of any of the provisions of the Contract requiring to be modified after the contract documents have been signed, modifications shall be made in writing and signed by MPCB.
2. Powers of Modification to contract: MPCB shall be entitled by order in writing to enlarge or extend, diminish, or reduce scope.

## 7.21 Extension of timelines

As soon as it is apparent that the Contract dates cannot be adhered to, an application shall be sent by Contractor to the MPCB. If failure, on the part of contractor, to complete scope of work in proper time shall have arisen from any cause which the MPCB may admit as reasonable ground for an extension of the time, MPCB may allow such additional time as it considers to be justified by circumstances.

## 7.22 Relationships

Nothing mentioned herein shall be construed as relationship of master and servant or of principal and agent as between the “MPCB” and the “Successful Bidder”. No partnership shall be constituted between MPCB and the Bidder by virtue of this contract nor shall either party have powers to make, vary or release their obligations on behalf of the other party or represent that by virtue of this or any other partnership has been constituted, or that it has any such power. The Successful Bidder shall be fully responsible for the services performed by them or on their behalf.

Neither party shall use the other parties name or any service or proprietary name, mark, or logo of the other party for promotional purpose without first having obtained the other party’s prior written approval.

## 7.23 Termination

### 7.23.1 Termination by MPCB

1. MPCB may, without prejudice to any other remedy for breach of Contract, terminate the Contract in case of the occurrence of any of the events specified in Clause 7.23.2 In such an occurrence, MPCB shall give not less than 15 days’ written notice of termination to the Successful Bidder.
2. If the Successful Bidder does not remedy a failure in the performance of its obligations under the Contract, within **Fifteen (15)** days after being notified or within any further period as MPCB may have subsequently approved in writing.

3. If the Successful Bidder becomes insolvent or goes into liquidation, or receivership whether compulsory or voluntary.
4. If the Successful Bidder, in the judgment of MPCB, has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.
5. If the Successful Bidder submits to the MPCB a false statement which has a material effect on the rights, obligations, or interests of MPCB.
6. If the Successful Bidder places itself in a position of conflict of interest or fails to disclose promptly any conflict of interest to MPCB.
7. If the Successful Bidder fails to provide the quality services as envisaged under this Contract, MPCB may make judgment regarding the poor quality of services, the reasons for which shall be recorded in writing. MPCB may decide to give one chance to the Successful Bidder to improve the quality of the services.
8. If the Successful Bidder fails to comply with any final decision reached as a result of arbitration proceedings.
9. If the Successful bidder fails to provide the quality services as envisaged under this Contract, MPCB may make judgment regarding the poor quality of services, the reasons for which shall be recorded in writing. MPCB may decide to give one chance to the Successful bidder to improve the quality of the services
10. If MPCB, in its sole discretion and for any reason whatsoever, decides to terminate this Contract.
11. In the event MPCB terminates the Contract in whole or in part, pursuant to 7.23.3, MPCB may procure, upon such terms and in such manner as it deems appropriate, services similar to those undelivered or not performed, and the Successful bidder shall be liable to MPCB for any additional costs for such similar services. However, the Successful bidder shall continue performance of the Contract to the extent not terminated.

#### **7.23.2 Termination by Bidder**

The Successful bidder may terminate this Contract, by not less than 30 days' written notice to MPCB, such notice to be given after the occurrence of any of the events specified 7.23.3:

- 1) If, as the result of Force Majeure, the Successful bidder is unable to perform a material portion of the Services for a period of not less than 60 days.
- 2) MPCB is in material breach of its obligations pursuant to this Contract and has not remedied the same within 30 days (or such longer period as the Successful bidder may have subsequently approved in writing) following the receipt by MPCB of the Successful bidder notice specifying such breach.

#### **7.23.3 Delays in bidder's performance**

- 1) If at any time during performance of the contract, the bidder may encounter conditions impeding performance of the services, the bidder shall promptly notify MPCB in writing of the facts of the delay, it's likely duration and its causes.
- 2) As soon as after receipt of bidder's notice, MPCB shall evaluate the situation and may at its discretion, extend the bidders time for performance with or without penalty in which case the extension shall be ratified by the bidders by amendment of the contract but in no case, extension shall be given more than one time. For avoidance of doubt, delay in performance for

reasons beyond control of the bidder or for reasons not attributable to the bidder or for reasons attributable to MPCB, shall not attract any penalty

#### **7.23.4 Payment upon Termination**

Upon termination of this Contract pursuant to Clauses 7.23.3 the MPCB shall make the following payments to the Successful bidder:

- 1) If the Contract is terminated pursuant to Clause 7.23.3, remuneration for Services satisfactorily performed prior to the effective date of termination.
- 2) If the agreement is terminated pursuant of Clause 7.23.3. The Successful bidder shall not be entitled to receive any agreed payments upon termination of the contract. However, the MPCB may consider making a payment for the part satisfactorily performed on the basis of Quantum Merit as assessed by it, if such part is of economic utility to the MPCB. Applicable under such circumstances, upon termination, the MPCB may also impose liquidated damages. The Successful bidder will be required to pay any such liquidated damages to MPCB within 30 days of termination date.

#### **7.24 Modification in requirements**

MPCB has given broad outline of this Project. The Bidder has to ensure fulfillment of all requirements for implementation of this project. However, due to change in Govt./ Corporation policy or due to unavoidable circumstances, MPCB's requirement, the Bidder has to modify/ deliver as per business needs during the contractual period, without any additional cost or any upward revision in rates.

#### **7.25 Bidder's integrity**

The bidder is responsible for oblige to conduct all contracted activities as defined in the scope of work in accordance with contract.

#### **7.26 Assignment and subletting**

The Successful Bidder shall not assign/ sublet/ sub-contract, in whole or in part, their rights and obligations under this Contract to any third party, except with prior written consent of the other party.



## 7.27 Bidder's obligation

- 1) The bidder is obliged to work closely with MPCB's staff, act within its own authority and abide by directives issued by MPCB.
- 2) The bidder shall abide by the job safety measures prevalent in India and will free MPCB from all demand or responsibilities arising from accidents or loss of life the calls of which is the bidder's negligence. The bidder will pay all indemnities arising from such incidents and will not hold MPCB responsible or obligated.
- 3) The bidder is responsible for managing the activities of its personnel will hold itself responsible for any misdemeanor.
- 4) The bidder shall treat as confidential all data and information about MPCB, obtained in the execution of his responsibilities in strict confidence and will not reveal such information to any other party. MPCB will treat as confidential all data and information about bidder, obtained in the execution of his responsibilities in strict confidence and will not reveal such information to any other party.

## 7.28 Force Majeure

A Force Majeure event shall mean occurrence in India of any or all of Non-Political Event, Indirect Political Event and /or Political Event.

1. Force Majeure shall not include any events caused due to acts/omissions of such Party or result from a breach/contravention of any of the terms of the Contract, Bid and/or the Tender. It shall also not include any default on the part of a Party due to its negligence or failure to implement the stipulated/proposed precautions, as were required to be taken under the Contract.
2. The failure or occurrence of a delay in performance of any of the obligations of either party shall constitute a Force Majeure event only where such failure or delay could not have reasonably been foreseen, or where despite the presence of adequate and stipulated safeguards the failure to perform obligations has occurred. In such an event, the affected party shall inform the other party in writing within Five (5) days of the occurrence of such event. The Employer will make the payments due for Services rendered / Machinery delivered till the occurrence of Force Majeure. However, any failure or lapse on the part of the Bidder's Team in performing any obligation as is necessary and proper, to negate the damage due to projected Force Majeure events or to mitigate the damage that may be caused due to the abovementioned events or the failure to provide adequate disaster management/recovery or any failure in setting up a contingency mechanism would not constitute force majeure, as set out above.
3. In case of a Force Majeure, all Parties will endeavour to agree on an alternate mode of performance in order to ensure the continuity of service and implementation of the obligations of a party under the Contract and to minimize any adverse consequences of Force Majeure.
4. The Bidder shall not be liable for forfeiture of its performance security, liquidated damages, or termination for default, if and to the extent that it's delay in performance or other failure to perform its obligations under the contract is the result of an event of force Majeure.

5. For purposes of this Clause, “Force Majeure” means an event beyond the control of the Vendor and not involving the Bidder’s fault or negligence and not foreseeable.
6. Such events may include, but are not limited to:

**(A) Non-Political Events**

A Non-Political Event shall mean one or more of the following acts or events:

- a. act of God, epidemic, extremely adverse weather conditions, lightning, earthquake, landslide, cyclone, flood, volcanic eruption, chemical or radioactive contamination or ionising radiation, fire, or explosion (to the extent of contamination or radiation or fire or explosion originating from a source external).
- b. strikes or boycotts (other than those involving the Contractors or their respective employees/representatives, or attributable to any act or omission of any of them) interrupting supplies and services to the Project for a continuous period of [24 (Twenty-Four)] hours and an aggregate period exceeding [Seven (7)] days in an Accounting Year.
- c. any failure or delay of a Contractor but only to the extent caused by another Non-Political Event and which does not result in any offsetting compensation being payable to the selected bidder by or on behalf of such Contractor.
- d. any delay or failure of an overseas Contractor to deliver rolling stock or equipment in India if such delay or failure is caused outside India by any event specified in Sub clause (a) above and which does not result in any offsetting compensation being payable to or on behalf of such Contractor.
- e. any judgement or order of any court of competent jurisdiction or statutory authority made against the successful bidder in any proceedings for reasons other than (i) failure of the successful bidder to comply with any Applicable Law or Applicable Permit, or (ii) on account of breach of any Applicable Law or Applicable Permit or of any contract, or (iii) enforcement of this Agreement, or (iv) exercise of any of its rights by the Authority; the discovery of geological conditions, toxic contamination or archaeological remains on the Site that could not reasonably have been expected to be discovered through a site inspection;

**(B) Indirect Political Event**

An Indirect Political Event shall mean one or more of the following acts or events:

- a. an act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, riot, insurrection, terrorist or military action, civil commotion, or politically motivated sabotage.
- b. any political or economic upheaval, disturbance, movement, struggle, or similar occurrence which could not have been anticipated or foreseen by a prudent person and which causes the construction or operation of the Project to be financially unviable or otherwise not feasible.

- c. industry-wide or State-wide strikes or industrial action for a continuous period of [24(Twenty-Four)] hours and exceeding an aggregate period of [Seven (7)] days in an Accounting Year.
- d. failure of the Authority to permit the successful bidder to continue its construction works, with or without modifications, in the event of stoppage of such works after discovery of any geological or archaeological finds or for any other reason.
- e. any Indirect Political Event that causes a Non-Political Event; or
- f. Any event or circumstances of a nature analogous to any of the foregoing.

### **(C) Political Event**

A Political Event shall mean one or more of the following acts or events by or on account of any Government Instrumentality:

- a. Change in Law, wherein the provisions mentioned in the RFP cannot be applied.
- b. compulsory acquisition in national interest or expropriation of any Project Assets or rights of the entire scheme
- c. unlawful or unauthorised or without jurisdiction revocation of, or refusal to renew or grant without valid cause, any clearance, licence, permit, authorisation, no objection certificate, consent, approval or exemption required by successful bidder to perform their respective obligations under this Agreement and the Project Agreements; provided that such delay, modification, denial, refusal or revocation did not result from the successful bidder inability or failure to comply with any condition relating to grant, maintenance or renewal of such clearance, licence, authorisation, no objection certificate, exemption, consent, approval or permit;
- d. Any event or circumstance of a nature analogous to any of the foregoing.
- e. Acts of God or of public enemy, acts of Government of India in their sovereign capacity, acts of war, acts of terrorism, either in fires, floods, strikes, lockouts and freight embargoes.
7. If a Force Majeure situation arises, the Successful Bidder shall promptly notify the MPCB in writing of such conditions and the cause thereof within twenty calendar days.
8. Unless otherwise directed by the MPCB in writing, the Bidder shall continue to perform its obligations under the Contract as far as it is reasonably practical and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event. In such a case, the time for performance shall be extended by a period(s) not less than the duration of such delay.
9. If the duration of delay continues beyond a period of Three (3) months, Board and the Successful Bidder shall hold consultations with each other in an endeavour to find a solution to the problem. Notwithstanding above, the decision of the MPCB, shall be final and binding on the Successful Bidder.

## **7.29 Governance Schedule**

1. The Successful Bidder shall document the agreed structures in a procedural manual under the guidance and supervision of MPCB.
2. The agenda for each project review meeting shall be set to reflect the discussion items related to the scope of work and additional items may be added either with the agreement of the Parties or at the request of either Party.
3. Copies of the agenda for review meetings along with relevant pre-reading material, shall be distributed.
4. All meetings and proceedings will be documented; such documents to be distributed to both Parties and copies shall be kept as a record. All actions, responsibilities and accountabilities arising out of any meeting shall be tracked and managed.
5. The parties agree to attempt to resolve all disputes arising under the Agreement, equitably and in good faith. To this end, the parties agree to provide frank, candid and timely disclosure of all relevant facts, information, and documents to facilitate discussions between them/their representatives or senior officers.

### **7.30 Exit Management**

- a. Agency shall decommission and withdraw all hardware and software components after the completion of the contract period and formally close the project. This process will be initiated 6 months before the ending of the project contract. In order to align both the parties on transition modalities, agency will submit a detailed Exit Management Plan before Three (3) months of the ending date of the contract. Exit Management Plan will include following but not limited to:
  - i. Detailed inventory of all the machinery integrated vehicles, assets, IT Infrastructure, source code, its location, condition, licenses, documents, manuals, etc. created under this Project.
  - ii. Method of Transition including roles and responsibilities of both the parties to handover and takeover the charge of project regular activities and support system.
  - iii. Proposal for necessary setup or institution structure required at MPCB level to effectively maintain the project after contract ending.
  - iv. Training and handholding of MPCB Staff or designated officers for maintenance of project after contract ending.
- b. The Successful Bidder may be requested to give handover to the other party / new agency or bidder as per the MPCB`s discretion.
- c. MPCB will approve this plan after necessary consultation and start preparation for transition.

## **SECTION 8: ANNEXURES**

## Annexure 1 Pre-Qualification Cover Letter

(To be submitted on the letterhead of the bidder)

Place:

Date: DD/MM/YYYY

To  
**The Member Secretary,**  
Maharashtra Pollution Control Board,  
Kalpataru Point, 3<sup>rd</sup> floor,  
Opp. PVR Cinema, Sion Circle, Sion,  
Mumbai-400 022

**Subject:** Bid Submission Cover Letter for Selection of an Agency for Supply, Installation, Testing, Training and Commissioning of RTWQMS In Maharashtra.

**Tender Reference No: MPCB/**

Dear Sir,

Having examined the RFP, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to provide the professional services as required and outlined in the RFP for Appointment of Consultant for Preparation of DPR for Pollution Abatement Works for Waldhuni and Godavari Rivers in the State of Maharashtra.

We attach hereto our responses to Pre-Qualification proposal required by the RFP. We confirm that the information contained in these responses or any part thereof, including the exhibits, and other documents and instruments delivered or to be delivered to MPCB, is true, accurate, verifiable and complete. This response includes all information necessary to ensure that the statements therein do not in whole or in part mislead the MPCB in its short-listing process.

We fully understand and agree to comply that on verification, if any of the information provided here is found to be misleading the selection process, we are liable to be dismissed from the selection process or termination of the contract during the project, if selected to do so.

We agree for unconditional acceptance of all the terms and conditions set out in the RFP document and corrigenda, if any, and agree to abide by this tender response for a period of 180 days from the date of opening of Financial Bid and ready to extend the validity of the bid for further period as informed by MPCB. We hereby declare that in case the contract is awarded to us, we shall submit the security deposit in the form prescribed the RFP.

We agree that you are not bound to accept any tender response you may receive. We also agree that you reserve the right in absolute sense to reject all or any of the products / services specified in the tender response.

It is hereby confirmed that I/We are entitled to act on behalf of our company/ corporation/ firm/ organization and empowered to sign this document as well as such other documents, which may be required in this connection.

Signature of Authorized Signatory (with official seal)

Name:

Designation:

Address:

Telephone & Fax:

E-mail address:

**Mandatory Enclosure:**

1. Format to share Bidder's and Bidding Firm's Particulars
2. Check list for the documents to be included in the Pre-Qualification with appropriate page numbers.
3. Format of Project Citation

## Annexure 2 Checklist for documents to be included in the Pre-Qualification proposal

S. No.	Minimum Eligibility Criteria-Pre-Qualification Criteria	Document to be submitted	Documents submitted (Yes/No)
<b>PQ 1</b>	<p>The bidder should be “A Company registered in India under the Companies Act 1956 or 2013 or a partnership firm under the Indian Partnership Act, 1932 or the Limited Liability Partnerships Act, 2008, (as amended from time to time)</p> <p>A Consortium comprising of a maximum of 02 (two) entities as mentioned above is allowed to participate in the Selection Process. In case more than 02 (two) entities participate in the Selection Process as a Consortium, then all such bid, shall be summarily rejected.</p>	<ul style="list-style-type: none"> <li>Copy of Certificate of Incorporation / Partnership deed</li> <li>Copy of valid PAN Card</li> <li>Copy of valid GST Certificate with GST Number</li> <li>Copy of Power of Attorney signed by legally authorized signatories as per <b>Annexure 17</b>.</li> </ul> <p>(In case of sole Bidder, it should be met by sole Bidder itself whereas in case of Consortium, this would be applicable for each of the Consortium members)</p>	
<b>PQ 2</b>	<p><b>Average Annual Turnover:</b></p> <p>Minimum Average Annual Turnover (MAAT) for the last</p>	<p>Copy of Annual Audited Financial Statements, Balance sheet and profit and loss statement, certified by a Chartered Accountant for the preceding Three years (FY</p>	



S. No.	Minimum Eligibility Criteria-Pre-Qualification Criteria	Document to be submitted	Documents submitted (Yes/No)
	<p>three (03) audited financial years (FY 2021-22, FY 2022-23 &amp; FY 2023-24) of the bidder should not be less than <b>INR 2.5 Crore (INR Three Crore only)</b></p>	<p>2021-22, FY 2022-23 &amp; FY 2023-24)</p> <p><b>Note: Audited financial statement should match with certificate of chartered accountant</b></p> <p><b>Certificate from Statutory Auditor as per Annexure 5.</b> (In case of sole Bidder, it should be met by the sole Bidder itself. Whereas in case of Consortium, either of the Consortium member should fulfil the relevant criterion)</p>	
<p><b>PQ 3</b></p>	<p><b>Net-worth Criteria:</b> The bidder should have a positive net worth for each of the last three audited financial years (FY 2021-22, FY 2022-23 &amp; FY 2023-24)</p> <p>[Net Worth as defined in Companies Act 1956 / 2013 as amended from time to time.]</p>	<p>Duly filled Format for Financial years (FY 2021-22, FY 2022-23 &amp; FY 2023-24) to be submitted on the letterhead of the Chartered Accountant</p> <p>Net worth Certificate duly certified by Chartered Accountant.</p> <p><b>Certificate from Statutory Auditor as per Annexure 5</b> (In case of sole Bidder, it should be met by sole Bidder itself whereas in case of Consortium, this would be applicable for each of the Consortium Members)</p>	
<p><b>PQ 4</b></p>	<p><b>Project Experience 1:</b></p>	<p>a. Bidders shall submit copy of Purchase Order (PO)/ Work Order (WO)/ Letter of</p>	

S. No.	Minimum Eligibility Criteria-Pre-Qualification Criteria	Document to be submitted	Documents submitted (Yes/No)
	<p>The Bidder must have experience in similar works with any State Government / Central Government / PSU / Union Territory (UT) / Urban Local Body (ULB)/ Govt in India/ large scale industries in past seven (07) years as on date of submission of bid per following details:</p> <ul style="list-style-type: none"> <li>- One (01) project worth <b>INR 6.5 Crore</b> (Six Crore Fifty Lakhs and above)</li> <li>OR</li> <li>- Two (02) projects worth <b>INR 4.0 Crore</b> (Four Crore and above)</li> <li>OR</li> <li>- Three projects worth <b>INR 3.20 Crore</b> (Three Crore twenty Lakhs) and above</li> </ul>	<p>Award (LOA) / Contract Agreement mentioning the relevant scope of Work.</p> <p>b. <b>Completion Certificate</b> from the client OR In case of on-going project, partial completion certificate from the client on client's letter head mentioning the relevant scope of Work, having received the payment matching the 'Minimum Project Value' of the partially completed project.</p> <p>c. <b>Proof of payment</b> for private companies work orders.</p> <p><b>Bidder to provide Project Citation as per Format in Annexure 4.</b></p> <p>(In case of sole Bidder, it should be met by the sole Bidder itself, whereas in case of Consortium, either of the Consortium member should fulfil the relevant criterion individually or jointly)</p>	
PQ 5	<p><b>Project Experience 2:</b></p> <p>The Bidder should have experience of successful installation of at least Thirty (30) nos. of RTWQMS during the past Seven</p>	<p>a) Bidders shall submit copy of work order/ contract agreement mentioning the relevant scope of Work.</p> <p>b) Completion Certificate from the client</p>	

S. No.	Minimum Eligibility Criteria-Pre-Qualification Criteria	Document to be submitted	Documents submitted (Yes/No)
	(07) years in any **large-scale industries.	c) Project Citation as per format specified in <b>Annexure 4</b> . d) Declaration for having experience <b>Annexure 8</b> . <b>*Only Completed projects shall be considered</b> (In case of sole Bidder, it should be met by the sole Bidder itself, whereas in case of Consortium, either of the Consortium member should fulfil the relevant criterion individually or jointly)	
<b>PQ 6</b>	<b>Project Experience 3:</b> The Bidder should have experience of “similar works” * of supplying at least Five (05) nos. of river RTWQMS along with Operation & Maintenance during the past Seven (07) years.	a. Bidders shall submit copy of Purchase Order (PO)/ Work Order (WO)/ Letter of Award (LOA) / Contract Agreement mentioning the relevant scope of Work. b. Completion Certificate from the client OR In case of on-going project, partial completion certificate from the client on client’s letter head mentioning the relevant scope of Work, having received the payment matching the ‘Minimum Project Value’ of the partially completed project. <b>Bidder to provide Project Citation as per Format in Annexure 4.</b> (In case of sole Bidder, it should be met by the sole Bidder itself, whereas in case of	c.

S. No.	Minimum Eligibility Criteria-Pre-Qualification Criteria	Document to be submitted	Documents submitted (Yes/No)
		Consortium, either of the Consortium member should fulfil the relevant criterion individually or jointly)	
<b>PQ 7</b>	<p><b>Manpower Strength</b> The Bidder should have at least <b>Twenty (20)</b> Service Engineers experienced in Comprehensive O &amp; M of RTWQMS, with either permanent PF account or professional tax account on bidder's payroll as on bid submission date.</p>	<ul style="list-style-type: none"> <li>▪ Attested copy of the Employee Provident Fund registration letter / certificate.</li> <li>▪ Attested copy of the Labour License under the Contract Labour (Regulation &amp; Abolition) Act.</li> <li>▪ Attested copy of the Employee State Insurance registration letter / certificate.</li> <li>▪ Bidder should provide above copies duly signed and stamped, along with the HR declaration provided in <b>Annexure 11.</b></li> </ul> <p>(In case of sole Bidder, it should be met by the sole Bidder itself, whereas in case of Consortium, either of the Consortium member should fulfil the relevant criterion individually or jointly)</p>	
<b>PQ 8</b>	<p><b>Certifications: OEM</b> / authorized bidder of OEM should have</p> <ul style="list-style-type: none"> <li>▪ valid ISO 9001: 2015 certification, and</li> <li>▪ valid certificate from ICAT/ ARAI</li> </ul>	<p>Copy of valid Certificate as of the date of bid submission.</p> <p>(In case of sole Bidder, it should be met by the sole Bidder itself, whereas in case of Consortium, either of the Consortium member should fulfil the</p>	

S. No.	Minimum Eligibility Criteria-Pre-Qualification Criteria	Document to be submitted	Documents submitted (Yes/No)
	<p>/ CIRT or equivalent government agency and Type Approval/ Homologation Certification (for machine)</p> <ul style="list-style-type: none"> <li>▪ TUV certification for Sensors</li> </ul>	<p>relevant criterion individually or jointly)</p>	
<b>PQ 9</b>	<p>The Bidder to submit Manufacturer Authorization Form (MAF) from the OEMs.</p>	<p>Self- Declaration should be submitted by the Original Equipment Manufacturer (OEM) for fulfilling the minimum technical specification of the product as per <b>Annexure 13</b>. OEM/ Dealer of the OEM should submit Manufacturer's Authorization Form (MAF) as per <b>Annexure 12</b>. (In case of sole Bidder, it should be met by the sole Bidder itself, whereas in case of Consortium, the Lead member of the Consortium should fulfil the relevant criterion)</p>	
<b>PQ 10</b>	<p><b>After Sales Support Capability:</b> The bidder shall have a functioning after sales support office in Maharashtra or shall open office in Maharashtra within fifteen (15) days in</p>	<p>Copy of existing office address proof like lease agreement/ latest electricity bill (not older than 06 (six) months from the Bid Due date) in the name of the bidder</p> <p>In the absence of an existing office in Maharashtra, the</p>	

S. No.	Minimum Eligibility Criteria-Pre-Qualification Criteria	Document to be submitted	Documents submitted (Yes/No)
	case of award of contract.	bidder must submit an undertaking to setup office in Maharashtra, on letterhead of firm signed by authorized signatory as per the format provided in the GeM Bid document as per <b>Annexure 10</b> . (In case of sole Bidder, it should be met by the sole Bidder itself, whereas in case of Consortium, the Lead member of the Consortium should fulfil the relevant criterion)	
<b>PQ 11</b>	<b>Blacklisting criteria:</b> The bidder (all members in case of consortium) should not have been debarred by any Government (State / Central) / Semi Government / Corporation / Union Territories/ PSU/ any other local Body or body established under or in the control of the Central or state Government in India in last three (03) years for unsatisfactory past performance, corrupt, fraudulent or any other unethical business practices as specified in <b>Rule 151 of GFR,</b>	Self-certification signed by the Authorized Signatory, on the company letter head as per format provided in this Bid document as per format in <b>Annexure 9</b> . (In case of sole Bidder, it should be met by sole Bidder itself whereas in case of Consortium, this would be applicable for each of the Consortium Members)	

S. No.	Minimum Eligibility Criteria-Pre-Qualification Criteria	Document to be submitted	Documents submitted (Yes/No)
	as on date of bid submission.		
<b>PQ 12</b>	<p><b>Minimum technical specification requirements.</b> The bidder must meet the minimum technical specifications mentioned in the Bid document for the machines and other equipment's involved in for Supply, Installation, Testing, Training and Commissioning of RTWQMS</p>	<p>Self-certification signed by the Authorized Signatory, on the company letter head as per format provided in this Bid document as per <b>Annexure 21</b> along with other supporting documents like brochures. (In case of sole Bidder, it should be met by the sole Bidder itself, whereas in case of Consortium, either of the Consortium member should fulfil the relevant criterion individually for each of the instrument or jointly for overall individual instrument/ system)</p>	

## Annexure 3 Bidder's and Bidding Firms Particulars

### Bidders Profile

The Table below provides the format in which general information about the bidder must be furnished.

S. No	Description	Details/Information
1	Name of the firm	
2	Address	
3	Email	
4	Contact number/s (Tel / Mobile)	
5	Office address of Maharashtra	
6	Year of establishment	
7	Name/s of partners (Membership certificates issued by authorized body should be enclosed)	
8	Name of Office In charge of Mumbai	
9	Name, address and account number of the firm's banker(s)	
10	PAN of the firm	
11	GST registration number of the firm	
12	Number of Employees	
13	Average Turnover during last three financial years (FY 2021-22, FY 2022-23 & FY 2023-24)	
14	Details of major assignments	
15	Any other information considered relevant.	

Please submit the relevant proofs for all the details mentioned above along with your Bid response

Signature of Authorized Signatory (with official seal)

Name :  
Designation :  
Address :  
Telephone :  
E-mail address :



## Annexure 4 Project Citation

### Details of past assignments / experience

Sr. No	Client Name	Handling		Work related to
		From	To	

### Individual Project Citation Format

Sr. No.	Item	Details
1	Name of The Project	
2	Date of Work Order	
3	Client Details with Address and Contact Numbers	
4	Scope of Work	
5	Contract Value	
6	Start date	
7	Completion Date	
8	Current Status (Work In progress, Completed)	
9	Number of staff deployed on the assignment	
10	Narrative description of project describing the scope of work	
11	Progress of the project (Description)	
12	Payment Received till Date	

#### Note:

- The Bidder is required to use above formats for all the projects referenced by the bidder for the pre-qualification criteria.
- Documents/Proofs are required for all of the above
- Kindly provide copies of supporting documents such as Letter of award/ work order/ agreement/ contract/ MoU/ Completion certificate etc.
- The Bidder is required to use above formats for all the projects referenced by the bidder for the Qualifying technical bid evaluation.

Signature of Authorized Signatory (with official seal)

Name :  
Designation :  
Address :  
Telephone :  
E-mail address :

## Annexure 5 Financial Declaration of Bidder

(To be submitted on Letterhead of Statutory Auditor of respective Bidders)

We, ....., certify that we have verified the relevant financial statements and other records of ..... (Name of Company), having its Indian registered office at..... The financials for the past Three (3) years have been summarized below:

- Financial Declaration of Bidder

Description	Financial Year		
	2021-22	2022-23	2023-24
(All Currency in INR and Crores)			
Annual Turnover			
Net Worth			
Average Annual Turnover			

The Average Annual Turnover for ..... (Name of the Company) is INR <Insert Value> (Rupees <Insert Value in Words> and the ..... (Name of the Company) has Positive Net Worth during the last 3 (three) Financial Years. (FY 2021-22, FY 2022-23 & FY 2023-24)

This is to certify that the (insert name of Bidder) has a Positive Net Worth in each of the last three (03) (FY 2021-22, FY 2022-23 & FY 2023-24)

It is further certified that based on our review of financial statements together with the book of accounts, records and documents for the aforesaid financial years, the above-mentioned figures are true and correct to the best of our knowledge and as per information and explanations provided to our satisfaction by the ..... (Name of the Company).

Signature of Authorized Signatory (with official seal)

Name :

Designation :

Address :

Telephone :

E-mail address :

Notes:

1. Numbers available in currency other than Indian Currency have been converted using the Reserve Bank of India exchange rate prevailing on the last day of respective financial year.
2. The Financial Declaration submitted with the Bid must be certified and signed by a competent and qualified Chartered Accountant/ Statutory Auditor and should be on the Firms' letterhead; affixed with the Firm's seal.
3. Audited Balance sheet and Profit & Loss account statement of the Bidder (Lead Member and Other Member in case of Consortium) for each of the last 3 audited financial years FY 2021-22, FY 2022-23 and FY 2023-24 shall submitted as supporting evidence.

## Annexure 6 Technical Proposal Bid Cover Letter

(To be submitted on the Letterhead of the responding firm)

Date: dd/mm/yyyy

To  
Member Secretary  
Maharashtra Pollution Control Board,  
Kalpataru Point, 3<sup>rd</sup> floor,  
Opp. PVR Cinema, Sion Circle, Sion,  
Mumbai-400 022

**Sub: Request for Proposal for Selection of an Agency for Supply, Installation, Testing, Training and Commissioning of RTWQMS In Maharashtra**

**Ref: RFP Notification number:**

Dear Sir,

Having examined the RFP, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to provide the professional services as required and outlined in the RFP for **“Request for Proposal for Selection of an Agency for Supply, Installation, Testing, Training and Commissioning of RTWQMS In Maharashtra ’**

We attach hereto the technical response as required by the RFP, which constitutes our proposal. We undertake, if our proposal is accepted, to adhere to the implementation plan (Project schedule) for providing Professional Services in “Request for Proposal for Selection of an Agency for Supply, Installation, Testing, Training and Commissioning of RTWQMS In Maharashtra.” put forward in RFP or such adjusted plan as may subsequently be mutually agreed between us and MPCB or its appointed representatives.

If our proposal is accepted, we will obtain a Performance Security Deposit (Bank Guarantee) issued by a nationalized/ schedule commercial bank in India, as mentioned in the Contract, 10% of contract value.

We agree for unconditional acceptance of all the terms and conditions set out in the RFP document and also agree to abide by this tender response for a period of 180 days from date of opening Financial Bid and it shall remain binding upon us with full force and virtue, until within this period a formal contract is prepared and executed, this tender response, together with your written acceptance thereof in your notification of award, shall constitute a binding contract between us and MPCB.

We confirm that the information contained in this proposal or any part thereof, including its exhibits, schedules, and other documents and instruments delivered or to be delivered to MPCB is true, accurate,

and complete. This proposal includes all information necessary to ensure that the statements therein do not in whole or in part mislead MPCB as to any material fact.

We agree that you are not bound to accept any tender response you may receive. We also agree that you reserve the right in absolute sense to reject all or any of the products/ services specified in the tender response.

It is hereby confirmed that I/We are entitled to act on behalf of our company/ corporation/ firm/ organization and empowered to sign this document as well as such other documents, which may be required in this connection.

Date:

(Signature)

(Name)

(In the capacity of)

[Seal / Stamp of bidder]

Witness Signature:

Witness Name:

Witness Address:

-----  
**CERTIFICATE AS TO AUTHORISED SIGNATORIES**

I \_\_\_\_\_, the Company Secretary of \_\_\_\_\_, certify that \_\_\_\_\_ who signed the above Bid is authorized to do so and bind the Company by authority of its board/ governing body.

Date:

Signature:

(Company Seal) (Name)

## Annexure 7 Checklist for documents to be included in the Technical qualification

S. No.	Criteria	Evaluation Parameters	Max. Marks	Supporting Documents	Documents Submitted (Yes/No)
TE 4	<b>Financial Strength (15 Marks)</b>				
TE 1.1	Minimum Average Annual Turnover (MAAT) for the last three (03) audited financial years (FY 2021-22, FY 2022-23 & FY 2023-24) of the bidder should not be less than <b>INR 2.5 Crore (INR Two Crore Fifty Lakhs only)</b>	Average Annual Turnover (in INR) (Cr.) 4) $\geq 2.5$ Cr. and $< 05$ Cr. : <b>05 marks</b> 5) $\geq 05$ Cr. and $< 10$ Cr. : <b>10 marks</b> 6) $\geq 10$ Cr.: <b>15 marks</b>	15	a) Audited Financial Statements (Balance Sheet and Profit & Loss Statements) from the Statutory Auditor/ Chartered Accountant and b) Certificate duly signed by Statutory Auditor of the Bidder for total turnover as per the format in <b>Annexure 5.</b>  (In case of sole Bidder, it should be met by the sole Bidder itself. Whereas in case of Consortium, either of the Consortium member should fulfil the relevant criterion)	
TE 5	<b>Bidder's Relevant Strength (50 marks)</b>				
TE 2.1	The Bidder must have experience in similar works with any State Government / Central Government / PSU / Union Territory (UT) / Urban Local Body (ULB)/ Govt in India/ large scale industries in past seven (07) years as on date of submission of bid per	<b>Project value of maximum any three projects submitted</b> <b>Maximum three projects</b>  <b>Value of the Project</b> 4) $\geq 6.5$ Cr and $< 9.5$ Cr: <b>5 marks</b> 5) $\geq 9.5$ Cr and $< 12.5$ Cr: <b>8 marks</b> 6) $\geq 12.5$ Cr: <b>10 marks</b>	10	a) Bidders shall submit copy of work order/ contract agreement mentioning the relevant scope of Work. b) Completion Certificate from the client OR In case of on-going project, partial completion certificate from the client on client's letter head mentioning the relevant scope of Work, having	

S. No.	Criteria	Evaluation Parameters	Max. Marks	Supporting Documents	Documents Submitted (Yes/No)
	<p>following details:</p> <ul style="list-style-type: none"> <li>- One (01) project worth <b>INR 6.5 Crore</b> (Six Crore Fifty Lakhs and above) OR</li> <li>- Two (02) projects worth <b>INR 4.0 Crore</b> (Four Crore and above) OR</li> <li>- Three projects worth <b>INR 3.20 Crore</b> (Three Crore twenty Lakhs) and above</li> </ul>			<p>received the payment matching the 'Minimum Project Value' of the partially completed project.</p> <p>c) Project Citation as per format specified in <b>Annexure 4.</b></p> <p>d) Declaration for having experience <b>Annexure 8.</b></p> <p><b>*Only Completed projects shall be considered.</b></p> <p>(In case of sole Bidder, it should be met by the sole Bidder itself, whereas in case of Consortium, either of the Consortium member should fulfil the relevant criterion individually or jointly)</p>	
TE 2.2	The Bidder should have experience of "similar works" * of supplying at least <b>Five (05) nos. of river RTWQMS</b> along with Operation & Maintenance during the past	<p>4) <math>\geq</math> 05 stations and &lt; 06 stations: <b>10 marks</b></p> <p>5) <math>\geq</math> 06 stations. and &lt; 08 stations: <b>15 marks</b></p> <p>6) <math>\geq</math> 08 stations.: <b>20 marks</b></p>	20		

S. No.	Criteria	Evaluation Parameters	Max. Marks	Supporting Documents	Documents Submitted (Yes/No)
	Seven (07) years.	* For the purpose of marking, the number of titanium based real time water quality monitoring stations on rivers shall be considered			
TE 2.3	The Bidder should have experience of successful installation of at least <b>Thirty (30) nos. of RTWQMS</b> during the past Seven (07) years in any <b>**large-scale industries.</b>	4) $\geq 30$ stations and $< 50$ stations: <b>10 marks</b> 5) $\geq 50$ stations. and $< 75$ stations: <b>15 marks</b> 6) $\geq 75$ stations : <b>20 marks</b>	20		
TE 6	<b>Manpower strength (20 Marks)</b>				
3.1	The Bidder should have at least <b>Twenty (20)</b> Service Engineers experienced in Comprehensive O & M of RTWQMS, with either permanent PF account or professional tax account on bidder's payroll as on bid submission date.	4) $\geq 20$ people $< 40$ resources: <b>10 marks</b> 5) $\geq 40$ and $< 60$ resources: <b>15 marks</b> 6) $\geq 60$ resources: <b>20 marks</b>	20	HR declaration as in format given in <b>Annexure 11.</b> (In case of sole Bidder, it should be met by the sole Bidder itself, whereas in case of Consortium, either of the Consortium member should fulfil the relevant criterion individually or jointly)	
TE 4	<b>Presentation (15 marks)</b>				



S. No.	Criteria	Evaluation Parameters	Max. Marks	Supporting Documents	Documents Submitted (Yes/No)
4.1	Presentation by the bidders on their understanding of the business/ functional requirements of MPCBs and proposed solution and implementation approach.	<p><b>For presentation in below categories:</b></p> <p>Service Provider's response on Terms of Reference will be scored on the following metrics.</p> <p>Metrics:</p> <ol style="list-style-type: none"> <li>1. Understanding of the scope of work</li> <li>2. Execution Timelines with justifications: Day-wise plan to be developed and demonstrated with expected outcomes and deliverables for each day.</li> <li>3. Compliance reporting plan- Proposed reporting and Project Handover including approach for sharing detailed evaluation criteria and assessments carried out.</li> </ol>	15	Presentation delivered by the bidder should depict Bidder's understanding of the business / functional requirements of the MPCB, the proposed solution and implementation approach.	

S. No.	Criteria	Evaluation Parameters	Max. Marks	Supporting Documents	Documents Submitted (Yes/No)
		4. Value Additions / differentiators that will benefit Government			
		<b>Total</b>	100		

## Annexure 8 Format for Self-Declaration

(To be submitted on the Letterhead of the responding company)

To,  
**The Member Secretary,**  
Maharashtra Pollution Control Board,  
Kalpataru Point, 3<sup>rd</sup> floor,  
Opp. PVR Cinema, Sion Circle, Sion,  
Mumbai-400 022

**Sub:** Declaration for having experience in providing similar equipments

### Tender Reference No:

Dear Sir,  
I, authorized representative of \_\_\_\_\_, hereby confirm that the Company \_\_\_\_\_ has the experience in “similar works” as mentioned in Clause 3.1 in last Seven (7) years as on last date of submission of bid.

Thanking you,

Yours faithfully,

\_\_\_\_\_  
Signature of Authorized Signatory (with official seal)

Date :  
Name :  
Designation :  
Address :  
Telephone :  
E-mail address :

## Annexure 9 Declaration by the Bidder for not being Blacklisted /Debarred

(To be submitted on the Letterhead of the responding company)

Date: DD/MM/YYYY

To  
**The Member Secretary,**  
Maharashtra Pollution Control Board,  
Kalpataru Point, 3<sup>rd</sup> floor,  
Opp. PVR Cinema, Sion Circle, Sion,  
Mumbai-400 022

**Subject:** Declaration for not being debarred / black-listed by Central / any Government or PSU in India as on the date of submission of the bid

### Tender Reference No:

Dear Sir,

I, authorized representative of \_\_\_\_\_, hereby solemnly confirm that the Company \_\_\_\_\_ is not debarred /blacklisted by any Government or PSU for any reason as on last date of submission of the Bid. In the event of any deviation from the factual information / declaration, MPCB, Government of Maharashtra reserves the right to reject the Bid or terminate the Contract without any compensation to the Company and forfeiture of Earnest Money Deposit and/or Performance Security.

Thanking you,

Yours faithfully,

\_\_\_\_\_  
Signature of Authorized Signatory (with official seal)

Date :  
Name :  
Designation :  
Address :  
Telephone :  
E-mail address :

## Annexure 10 Undertaking for After Sales Support Office in Maharashtra

(To be submitted on the Letter of lead bidder)

{Place, Date}

To,

**The Member Secretary,**

Maharashtra Pollution Control Board,

Kalpataru Point, 3<sup>rd</sup> floor, Opp. PVR Cinema,

Sion Circle, Sion, Mumbai-400 022

**Subject:** Undertaking for Opening Office in Maharashtra

**RFP Reference No:** MPCB/

Sir,

We, \_\_\_\_\_, (name of the Bidder) who are an established and reputed firm, having offices at \_\_\_\_\_(address) do hereby undertake to establish a fully functioning sales support office within the jurisdiction of State of Maharashtra within 15 days of award of work for the tender referenced above. We also undertake to assure the authority that the said office in Maharashtra shall remain fully functional and operational in the duration of the contract with the Maharashtra Pollution Control Board, Mumbai.

It is understood that failure to comply with this undertaking in any manner whatsoever, Maharashtra Pollution Control Board, Mumbai shall have the right to reject my / our bid and forfeit the submitted Earnest Money Deposit (EMD), and if the bid has resulted in a contract, the contract is liable to be terminated without prejudice to any other right or remedy (including blacklisting) available to Maharashtra Pollution Control Board, Mumbai.

Yours Sincerely,

\_\_\_\_\_  
Signature of Notary (with official seal)

Name :

Designation :

Seal :

Business Address :

## Annexure 11 Declaration regarding Human resources

(To be printed on Bidder Company's Letter Head and Signed by Authorized Signatory/HR Head)

{Place, Date}

To,

Member Secretary

Maharashtra Pollution Control Board,

Kalpataru Point, 3<sup>rd</sup> floor, Opp. PVR Cinema,

Sion Circle, Sion, Mumbai-400 022

Subject: HR Department Declaration for Supply, Installation, Testing, Training and Commissioning of RTWQMS In Maharashtra

RFP Reference No: MPCB/

With reference to the subject RFP, we hereby declare that we have the requisite number of employees for each category of resources with minimum qualification sought for in the RFP, working on our payroll or associated with us through proper binding agreement.

We also accept that, if it is found that any of the information provided by us is proved wrong/ falsified/ deviated/ incorrect/ concealed from facts, our bid will be summarily rejected along with the blacklisting of our firm and forfeiture of our EMD/ PBG, as the case may be.

Further the details of employees may be noted below (for all the type of resources sought for in the RFP):

S. No.	Position proposed for	Employee Name	Employee ID	Education & Area of Expertise	No. of Years with firm	Total No. of relevant exp.
1.	Team Lead					
2.	Service Engineers					

Yours sincerely,

Authorized Signatory/ HR Head

(Authorized person shall attach a copy of Authorization for signing on behalf of Bidding Company)

Full Name and Designation

## Annexure 12 MAF Manufacturer's Authorization form

<To be printed on the letterhead of the OEM and duly signing and sealing it from the Authorized Signatory of the OEM>

<The MAF is not applicable for the Bidder who is a Manufacturer. In such case the Bidder has to give a self-declaration stating its status as OEM and giving details about its facilities on their letterhead, duly signing and sealing it>

Date:

Place:

To,

**The Member Secretary,**

Maharashtra Pollution Control Board

Kalpataru Point, 3rd floor,

Opp. Cine Planet Cinema, Sion Circle,

Sion (E), Mumbai – 400 022

**Subject:** - Manufacturer Authorization Form (MAF) from OEM for the BID for Selection of an Agency for Supply, Installation, Testing, Training and Commissioning of RTWQMS In Maharashtra.

**Bid document Ref** <Reference No.>

Dear Sir,

We, who are established and reputed developers / producers of \_\_\_\_\_ having development facilities at (address of factory / facility) do hereby authorize M/s \_\_\_\_\_ (Name and address of Bidder) to submit a Bid and sign the contract with you against the above Bid Invitation.

S. No.	Name of OEM / Dealer	Name of other components	Name of Make (OEM)	Model	Version	Planned End of Sale	Planned End of Support and spare parts availability	Remark
1.								
2.								

- We hereby agree to the following with regards to the solution, products and services offered by us through the above firm against this Bid Invitation.
  - We extend full on-site guarantee and warranty.
  - OEM Warranty for the offered product(s), is for minimum one (01) year from the date of this letter.

- We have read and understood the said Bid document and the functional and technical requirements and the offered product(s), as mentioned above, is complying with the respective requirements.
- Confirm that the offered product(s) is not likely to be declared as
  - End of sale for attachment not within next 60 months
  - End-of-Support within next five years from the date of this letter
- Confirm that the support including spare parts for the quoted products shall be available for the entire contract period.
- We will provide any or all of the materials, notifications, and information
  - Such Products as MPCB may opt to purchase from OEM, provided, that this option shall not relieve OEM of any warranty obligations under the Contract; and
  - in the event of termination of production of such Products:
    - advance notification to MPCB of the pending termination, in sufficient time to permit MPCB to procure needed requirements; and
    - Following such termination, furnishing at no cost to MPCB, operations manuals, standards, and specifications of the Products, if requested.
- We duly authorize the bidder <Bidder name> to act on our behalf in fulfilling all technical support and Warranty Services obligations required by the contract.
- We, as OEM of \_\_\_\_< product>\_\_\_\_, agree to provide onsite delivery and support to <Bidder name> and shall physically visit as and when required & certify installation of attachments and Warranty Services of parts as per standards and best practices at all locations and submit our satisfactory report, which is one of the mandatory requirements for Bidder to proceed with further activities.

We also confirm that we have an existing registered service / support Centre in Maharashtra at

OR

We also conform we shall establish registered service / support Centre in Maharashtra within 15 days of award of contract to the Bidder \_\_<Name of the Lead Bidder>\_\_.

Yours faithfully,

For and on behalf of M/s \_\_\_\_\_ (Name of the manufacturer / OEM)

Signature :

Name :

Designation :

Address :

Date :

Company Seal

Thanking you,

(Signature, Name and Designation of the Authorized signatory of the Bidder)



## **Annexure 13 Manufacturer's Declaration about 100% compliance to Minimum Technical Specifications**

<This declaration must be on the letterhead of the Manufacturer, must be signed by a person of relevant competent authority, and must be included by the Bidder in its bid as specified in the Instructions to Bidders. The same should be accompanied by the compliance statement to the minimum required technical specifications, duly filled, and supported by relevant certifications and printed on Manufacturer's Letterhead>

Date:

Place:

To,

Member Secretary  
Maharashtra Pollution Control Board  
Kalpataru Point, 3<sup>rd</sup> floor,  
Opp. Cine Planet Cinema, Sion Circle,  
Sion (E), Mumbai – 400 022

Sub: Declaration of compliance to Minimum Technical Specifications of your RFP <Reference No.>

Dear Sir,

WHEREAS <Name and address of the Manufacturer> who are official producers of <Name of the product and product code> do hereby solemnly declare that

We have read and understood the minimum technical specifications mentioned in this Bid document and our feature-wise compliance status for the product proposed <Name of the product and product code> is correct for every specification mentioned therein. Pls find the compliance statement attached herewith duly filled, signed, and stamped.

We understand that if any of the points in this declaration is found to be incorrect, the bid will be declared as non-responsive and will not be considered for further evaluation.

Name

In the capacity of

Signed

Duly authorized to sign the authorization for and on behalf of: \_\_\_\_\_

Dated:

## **Annexure 14 Financial Proposal Cover Letter**

**(Not to be enclosed along with Technical Cover)**

**(To be submitted on the Letterhead of the bidder)**

Date: DD/MM/YYYY

To  
**The Member Secretary,**  
Maharashtra Pollution Control Board,  
Kalpataru Point, 3<sup>rd</sup> floor,  
Opp. PVR Cinema, Sion Circle, Sion,  
Mumbai-400 022

**Subject: Selection of an Agency for Supply, Commissioning and Maintenance of Real-Time Water Quality Monitoring Stations (RTWQMS) In Maharashtra**

**Ref: MPCB RFP No:**

Dear Sir,

We, the undersigned Bidders, having read and examined in detail all the bidding documents in respect of Request for Proposal for **Selection of an Agency for Supply, Commissioning and Maintenance of Real-Time Water Quality Monitoring Stations (RTWQMS) In Maharashtra** do hereby propose to provide Services as specified in the bidding documents.

1. **Price and Validity:** All the prices mentioned in our Bid are in accordance with the terms as specified in the bidding documents. All the prices and other terms and conditions of this Bid are valid for a period of 180 days from the date of opening of commercial bid
2. The prices we have offered, will remain fixed and subject to price escalation mention in the RFP during the period of Contract.
3. **Taxes:** We are an entity registered in India and do hereby confirm that our bid price is exclusive of all applicable taxes (i.e., GST). All relevant/ applicable taxes would be considered for reimbursement on actuals as per MPCB's discretion and prevailing Government laws
4. **Deviations:** We hereby declare that all terms and conditions mentioned in the RFP (all volumes, annexures, and corrigendum's) are acceptable to us without any deviations and all the services shall be performed strictly in accordance with the bid documents

5. Unit Rates: We have indicated in the relevant Annexures enclosed, the unit rates for the purpose of an account of payment as well as for price adjustment, in case of any increase / decrease from the scope of work under the contract.
6. Bid Price: We declare that our Bid Prices, exclusive of all applicable taxes, duties, and GST are for the entire scope of the work and requirements as specified in the Bid documents.
7. Contract Performance Bank Guarantee: We hereby declare that in case the Contract / Order is awarded to us, we shall submit the Contract Performance Bank Guarantee in the form prescribed in the RFP.
8. We hereby declare that our Bid is made in good faith, without collusion or fraud and the information contained in the Bid is true and correct to the best of our knowledge and belief. We also understand that if our bid is conditional in any way, it shall be summarily rejected.
9. We understand that our Bid is binding on us and that you are not bound to accept a bid you receive.
10. We confirm that no technical information or deviations are attached here with this Commercial offer.

We understand that our Tender is binding on us and that you are not bound to accept a Tender you receive. We confirm that no technical deviations are attached here with this financial offer. We remain,

Yours sincerely,

Authorized Signature [*In full and initials*] :  
Name and Title of Signatory :  
Date and Stamp of the signatory :  
Name of Firm :



## Annexure 15 Format for Financial Bid

### Part A: Equipment Cost

S. No.	Instrument / equipment & accessories	Make / Part no.	Unit price (INR) A	GST B	Unit price after GST (INR) C=A*B	Qty. (Nos.) D	Total (INR) E=C*D
1.	Real-Time Water Quality Monitoring Stations inclusive of Supply, Installation, Testing, Training, Commissioning as per Scope of Work defined					10	
<b>Total:</b>							
Customs duty, freight charges and other taxes, if any may also be incorporated in the price bid.							
						<b>Total:</b>	

### Part B: CAMC Cost

S. No.	Particulars	No. of station (Units) (INR) (A)	Unit Price per station (excl. GST) (INR) (B)	Total CAMC Amount excluding GST (In figures) (A x B)	Total CAMC Amount Without GST (In Words)
1	Total CAMC cost including Cost of (Incidental Charges consisting of security, Electricity, Phones/ internet, Manpower, AMCs, material including spares & consumables for Operation & maintenance and others	10			

*Note:*

- The Bidder shall provision for all costs required for the entire duration of the contract. MPCB shall not be liable to pay any additional costs, apart from that mentioned in the table above.
- The rate quoted by bidder shall include all costs associated with fulfilling the project deliverables, Out of Pocket Expenses including Travelling, Lodging, Food, insurance, etc. MPCB shall not pay any additional cost to bidder.

3. All costs shall remain valid for the entire duration of the contract.

**Note:**

4. The Bidder shall provision for all costs required for the entire duration of the contract. MPCB shall not be liable to pay any additional costs, apart from that mentioned in the table above.
5. The rate quoted by bidder shall include all costs associated with fulfilling the project deliverables, Out of Pocket Expenses including Travelling, Lodging, Food, insurance, etc. MPCB shall not pay any additional cost to bidder.
6. All costs shall remain valid for the entire duration of the contract.
7. MPCB shall consider the proposed rates for selection only, as mentioned in Section 3.3 of the RFP.
8. All factor/services/components need to be taken into consideration before filling rate in the Financial Proposal Format. No changes will be entertained once the bid has been submitted. MPCB does not guarantee work order for the bids submitted.
9. All the prices are to be entered in Indian Rupees ONLY.
10. The quoted rates shall be inclusive of all taxes and excluding GST. GST shall be paid as actual at prevailing rates by MPCB after awarding the contract to successful bidder at the time of releasing the payments.
11. Bids not conforming to the formats and instructions given below, the Bids will be considered as invalid / non-responsive. MPCB's decision will be final in such case.
12. The PRICE BID has to be submitted online in the BOQ format provided.
13. **BIDDERS ARE REQUESTED TO SUBMIT ONLINE COMMERCIAL BID FORMAT**
14. **A COPY OF COMMERCIAL BID PRINTED ON LETTERHEAD TO BE UPLOADED on Mahatender portal**

## **Annexure 16 Format for Performance Security/ Bank Guarantee to be Submitted After Award of Contract**

### **Form of Bid Security (Bank Guarantee)**

*(To be stamped in accordance with the Stamp Act of the Country of Issuing Bank)*

To  
**The Member Secretary,**  
Maharashtra Pollution Control Board,  
Kalpataru Point, 3<sup>rd</sup> floor,  
Opp. PVR Cinema, Sion Circle, Sion,  
Mumbai-400 022

Whereas <<name of the supplier and address>> (hereinafter called “the Bidder”) has undertaken, in pursuance of contract no. <Insert Contract No.> dated. <Date> for the **RFP for Selection of an Agency for Supply, Installation, Testing, Training and Commissioning of RTWQMS In Maharashtra.** (Hereinafter called “the beneficiary”)

And whereas it has been stipulated in the said contract that the Bidder shall furnish a bank guarantee by a recognized bank for the sum specified therein as security for compliance with its obligations in accordance with the contract.

And whereas we, <Name of Bank> a banking company incorporated and having its head /registered office at <Address of Registered Office> and having one of its offices at <Address of Local Office> have agreed to give the supplier such a bank guarantee.

Now, therefore, we hereby affirm that we are guarantors and responsible to you, on behalf of the Bidder, up to a total of Rs. <Insert Value> (Rupees <Insert Value in Words> only) and we undertake to pay you, upon your first written demand declaring the supplier to be in default under the contract and without cavil or argument, any sum or sums within the limits of Rs. <Insert Value> (Rupees <Insert Value in Words> only) as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

We hereby waive the necessity of your demanding the said debt from the Bidder before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the contract to be performed there under or of any of the contract documents which may be made between you and the Bidder shall in any way release us from any liability under this guarantee and we hereby waive notice of any such change, addition or modification.

This Guarantee shall be valid until <<Insert Date>>).

Notwithstanding anything contained herein:

- Our liability under this bank guarantee shall not exceed Rs. <Insert Value> (Rupees <Insert Value in Words> only).
- This bank guarantee shall be valid up to <Insert Expiry Date>
- It is condition of our liability for payment of the guaranteed amount or any part thereof arising under this bank guarantee that we receive a valid written claim or demand for payment under this bank guarantee on or before <Insert Expiry Date>) failing which our liability under the guarantee will automatically cease.

Dated \_\_\_\_\_ Day of \_\_\_\_\_ 2024

For \_\_\_\_\_

(Indicate the name of the Bank)



## Annexure 17 Power of Attorney

Know by all men by these presents, We \_\_\_\_\_ (Name of the Bidder and address of their registered office) do hereby constitute, appoint and authorize Mr. / Ms. \_\_\_\_\_ (name and residential address of Power of attorney holder) who is presently employed with us and holding the position of \_\_\_\_\_ as our Attorney, to do in our name and on our behalf, all such acts, deeds and things necessary in connection with or incidental to our Proposal for the “ **Request for Proposal for Supply, Installation, Testing, Training and Commissioning of RTWQMS In Maharashtra** ” including signing and submission of all documents and providing information / responses to the MPCB, representing us in all matters before MPCB, and generally dealing with the MPCB in all matters in connection with our Proposal for the said Project.

We hereby agree to ratify all acts, deeds and things lawfully done by our said Attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid Attorney shall and shall always be deemed to have been done by us.

For \_\_\_\_\_

Name :  
Designation :  
Date :  
Time :  
Seal :  
Business Address :

Accepted,

\_\_\_\_\_ (Signature)

(Name, Title and Address of the Attorney)

Note:

- The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executant(s) and when it is so required the same should be under common seal affixed in accordance with the required procedure.
- The Power of Attorney shall be provided on Rs.100/- stamp paper.
- The Power of Attorney should be supported by a duly authorized resolution of the Board of Directors of the Bidder authorizing the person who is issuing this power of attorney on behalf of the Bidder.

## Annexure 18 Format of sending pre-bid queries.

All queries for the pre-bid meeting needs to be submitted in the following format (both soft copy (editable excel format) and hard copy) as mentioned in section “Invitation for Bids”

**Ref:** RFP Ref. number:

Bidder's Request for Clarification				
Name and complete official address of Organization submitting query / request for clarification			Telephone, Fax, and E-mail of the organization Tel: Email:	
Sr. No.	Clause No.	Page No.	Content of RFP Requiring Clarification	Change Requested/ Clarification required
1				
2				

Signature :

Name of the Authorized signatory :

Company seal :

Date and Stamped :

## Annexure 19 Draft Conditions of Contract

This AGREEMENT is made at \_\_\_\_\_, Maharashtra, on this \_\_\_\_ day of, \_\_\_\_ 2024,

### BETWEEN

<<Insert Designation of Authorized Signatory>> Maharashtra Pollution Control Board, Government of Maharashtra, having its office at Kalpataru Point, 3<sup>rd</sup> Floor, opposite PVR Cinema, Sion Circle, Sion, Mumbai -400022, Maharashtra India hereinafter referred to as ‘MPCB’ or “First Part” which expression shall, unless the context otherwise requires, include its permitted successors and assigns.

And

<<\*\*\*>>, a Company incorporated under the *Companies Act, 1956*, having its registered office at <<\*\*\*>> (hereinafter referred to as “Party” or “Second Part” which expression shall, unless the context otherwise requires, include its permitted successors and assigns).

Each of the parties mentioned above are collectively referred to as the ‘Parties’ and individually as a ‘Party’

Whereas:

Whereas MPCB has envisaged ----- (hereinafter referred to as the “said Project”).

And whereas MPCB has published the RFP to seek services of a reputed Agency for -----.

And whereas M/s. ----- has submitted its proposal for-----.

And whereas MPCB and M/s. ----- have decided to enter into this Agreement on the terms and conditions stipulated hereinafter.

NOW, THEREFORE, THIS AGREEMENT WITNESSETH and the parties hereto hereby mutually agree as follows: -

The Agreement shall consist of this Contract Form and the following documents, hereinafter referred to as the ‘Contract Documents’, all of which by this reference are incorporated herein and made part hereof:

1. Notification of Award / Work Order
2. RFP / Tender Form
3. Scope of Work as given in the RFP / Tender Document.
4. Project & Payment schedule as given in the RFP / Tender Document.
5. Terms & Conditions of Contract as given in the RFP / Tender Document.
6. Service Level Agreement (SLA) as given in the RFP / Tender Document.
7. Qualifying Technical proposal of Tenderer.

8. Financial Proposal.
9. Corrigendum, if any.

This Agreement sets forth the entire contract and agreement between the parties pertaining to “\_\_\_\_\_” and supersedes any and all earlier verbal or written agreements. This agreement shall prevail over all other Contract Documents. In the event of any discrepancy or inconsistency within the contract documents, then the documents shall prevail in the order listed above.

In consideration of the payments to be made by the Corporation to the Agency as hereinafter mentioned, the Agency hereby covenants with the MPCB to provide services with the provisions of the Contract. The Contract Price or such other sum as may become payable under the provisions of the agreement shall be at the times and in the manner prescribed in the Agreement.

Any notice under this agreement shall be in the form of letter, fax. Notices to either party will be given at such address/addresses as such party shall specify from time to time by written notice to the other. Notice to the MPCB shall be properly addressed to:

To,  
**The Member Secretary,**  
Maharashtra Pollution Control Board,  
Kalpataru Point, 3<sup>rd</sup> floor, Opp. PVR Cinema,  
Sion Circle, Sion, Mumbai-400 022

and notice to the agency shall be properly addressed to:

\_\_\_\_\_

A notice shall be effective when delivered or on the notice’s effective date, whichever is later.

IN WITNESS WHEREOF the parties hereto have caused this agreement to be executed in accordance with their respective laws the day and year first above written.

Signed, sealed, and delivered.

By -----  
**The Member Secretary,**  
For and on behalf of MPCB

Signed, sealed and delivered  
By -----

For and on behalf of the “Agency”,

Witnesses:

(1)

(2)

NOW THEREFORE, in consideration of the mutual covenants, promises, assurances, representations and provisions set forth herein, the Parties hereto agree as follows:

<< Scope of Work, Solution Overview, Project & Payment Schedule, Terms & Conditions as specified above in the RFP document>>

Note:

1. The stamp duty payable for the contract shall be borne by the Agency
2. The above Draft Master Service Agreement is only indicative description of the contract agreement. However, the actual contract agreement shall be finalized and notified by the Purchaser after final selection of the Agency

## Annexure 20 Non-Disclosure Agreement

[Company Letterhead]

This AGREEMENT (hereinafter called the “Agreement”) is made on the [day] day of the month of [month], [year], between, Maharashtra Pollution Control Board on the one, (hereinafter called the “MPCB”) and, on the other hand, [Name of the Bidder] (hereinafter called the “Bidder”) having its registered office at [Address]

### WHEREAS

1. The “MPCB” has issued a public notice inviting various organizations for Selection of an Agency for Supply, Installation, Testing, Training and Commissioning of RTWQMS In Maharashtra (Hereinafter called the “Project”) of the MPCB.
2. The Bidder, having represented to the “MPCB” that it is interested to bid for the proposed Project,
3. The MPCB and the Bidder agree as follows:
  - a) In connection with the “Project”, the MPCB agrees to provide to the Bidder a detailed document on the Project vide the Request for Proposal document. The Request for Proposal contains details and information of the MPCB operations that are considered confidential.
  - b) The Bidder to whom this information (Request for Proposal) is disclosed shall –
    - i. hold such information in confidence with the same degree of care with which the Bidder protects its own confidential and proprietary information.
    - ii. restrict disclosure of the information solely to its employees, other member with a need to know such information and advice those persons of their obligations hereunder with respect to such information.
    - iii. use the information only as needed for the purpose of bidding for the Project.
    - iv. except for the purpose of bidding for the Project, not copy or otherwise duplicate such information or knowingly allow anyone else to copy or otherwise duplicate such information; and
    - v. undertake to document the number of copies it makes
    - vi. on completion of the bidding process and in case unsuccessful, promptly return to the MPCB, all information in a tangible form or destroy such information
4. The Bidder shall have no obligation to preserve the confidential or proprietary nature of any information which:
  - was previously known to the Bidder free of any obligation to keep it confidential at the time of its disclosure as evidenced by the Bidder’s written records prepared prior to such disclosure; or
  - is or becomes publicly known through no wrongful act of the Bidder; or
  - is independently developed by an employee, agent or contractor of the Bidder not associated with the Project and who did not have any direct or indirect access to the information.

5. The Agreement shall apply to all information relating to the Project disclosed by the MPCB to the bidder.
6. MPCB will have the right to obtain an immediate injunction enjoining any breach of this Agreement, as well as the right to pursue any and all other rights and remedies available at law or in equity for such a breach.
7. MPCB reserves the right to share the information received from the bidder under the ambit of RTI Act.
8. Nothing contained in this Agreement shall be construed as granting or conferring rights of license or otherwise, to the Bidder, on any of the information. Notwithstanding the disclosure of any information by the MPCB to the Bidder, the MPCB shall retain title and all intellectual property and proprietary rights in the information. No license under any trademark, patent or copyright, or application for same that are now or thereafter may be obtained by the MPCB is either granted or implied by the conveying of information. The Bidder shall not alter or obliterate any trademark, trademark notice, copyright notice, confidentiality notice or any notice of any other proprietary right of the MPCB on any copy of the information and shall reproduce any such mark or notice on all copies of such information.
9. This Agreement shall be effective from the date of signing of this agreement and shall continue perpetually.
10. Upon written demand of the MPCB, the Bidder shall (i) cease using the information, (ii) return the information and all copies, notes or extracts thereof to the MPCB forthwith after receipt of notice, and (iii) upon request of the MPCB, certify in writing that the Bidder has complied with the obligations set forth in this paragraph.
11. This Agreement constitutes the entire Agreement between the MPCB and the Bidder relating to the matters discussed herein and supersedes any and all prior oral discussions and/or written correspondence or agreements between the two parties. This Agreement may be amended or modified only with the mutual written consent of the parties. Neither this Agreement nor any right granted hereunder shall be assignable or otherwise transferable.
12. Confidential information is provided “As-Is”. In no event shall the MPCB be liable for the accuracy or completeness of the confidential information.
13. This agreement shall benefit and be binding upon the MPCB and the Bidder and their respective subsidiaries, affiliate, successors, and assigns.
14. This agreement shall be governed by and construed in accordance with the Indian laws.

For and on behalf of the Bidder

(Signature)

(Name of the authorized Signatory)

Designation :  
Date :  
Time :  
Seal :  
Business Address



## Annexure 21 Evaluation format for technical specifications

Detailed comparison statement for each technical specification and deviation statement for each must be enclosed for technical evaluation.

S. No.	Specification	Bidder's response (Bidder shall indicate "Complied" *or "non-Complied" as applicable in each row. In case of "non-complied", added details shall be mentioned)
1	Minimum specification for pH Sensor	
2	Specifications for Biochemical Oxygen Demand (BOD) sensor	
3	Specifications for Chemical Oxygen Demand (COD) sensor	
4	Specifications for Total Suspended Solids (TSS) sensor	
5	Specifications for Nitrate (NO <sub>3</sub> -N)	
6	Specifications for Chloride	
7	Specifications for Dissolved Oxygen	
8	Specifications for Turbidity	
9	Specifications for Conductivity	
10	Specifications for Ammonia	
11	Specifications for Smart Controller and Data logger	
12	Specifications for Display Board	
13	Specifications for Radar water level sensor	
14	Specifications for Data Logger	
15	Specifications for Cabin shelter	
16	Specifications for Data acquisition system	
17	Specifications of software	

**Note:** Please attach relevant support documents / brochures for verification.

## Annexure 22 Joint Bidding Agreement

(On Stamp Paper of requisite value)

THIS JOINT CONSORTIUM AGREEMENT is entered into on this the ..... day of ..... 20...

AMONGST

..... Limited, a company incorporated under the Companies Act, 1956/2013 , registered on ..... < dd/mm/yyyy> and having its registered office at ..... (Herein after referred to as the “First Part” which expression shall, unless repugnant to the context include its successors and permitted assigns)

AND

..... Limited, a company incorporated under the Companies Act, 1956/2013, registered on ..... < dd/mm/yyyy> and having its registered office at ..... (Herein after referred to as the “Second Part” which expression shall, unless repugnant to the context include its successors and permitted assigns)

WHEREAS,

Maharashtra Pollution Control Board having its office at 3<sup>rd</sup> and 4<sup>th</sup> Floor Kalpataru Point, Opp Cine Planet, Sion Circle (East), Mumbai, Maharashtra 400022. (hereinafter referred to as the “Authority” which expression shall, unless repugnant to the context or meaning thereof, include its administrators, successors and assigns) has invited applications (the Applications”) by its **Request for Proposal for Selection of an Agency for Supply, Installation, Testing, Training and Commissioning of RTWQMS In Maharashtra.**

The Parties are interested in jointly bidding for the Project as members of a Consortium and in accordance with the terms and conditions of the RFP document and other bid documents in respect of the Project, and It is a necessary condition under the RFP document that the members of the Consortium shall enter into a Joint Consortium Agreement and furnish a copy thereof with the Application.

**NOW IT IS HEREBY AGREED as follows:**

### 1. Definitions and Interpretations

In this Agreement, the capitalized terms shall, unless the context otherwise requires, have the meaning ascribed thereto under the RFP.

### 2. Consortium

- 2.1 The Parties do hereby irrevocably constitute a consortium (the “**Consortium**”) for the purposes of jointly participating in the Bidding Process for the Project.
- 2.2 The Parties hereby undertake to participate in the Bidding Process only through this Consortium and not individually and/ or through any other consortium constituted for this Project, either directly or indirectly or through any of their Associates.

### 3. Role of the Parties

The Parties hereby undertake to perform the roles and responsibilities as described below:

Party of the First Part shall be the sample courier agency and shall be the Lead member of the Consortium and shall have the power of attorney from all Parties for conducting all business for and on behalf of the Consortium during the Bidding Process and until the Appointed Date

Party of the Second Part shall be the IT System Integrator of the Consortium.

### 4. Joint and Several Liability

The Parties do hereby undertake to be jointly and severally responsible for all obligations and liabilities relating to the Project and in accordance with the terms of the RFP

### 5. Representation of the Parties

Each Party represents to the other Parties as of the date of this Agreement that:

Such Party is duly organized, validly existing and in good standing under the laws of its incorporation and has all requisite power and authority to enter into this Agreement;

The execution, delivery and performance by such Party of this Agreement has been authorized by all necessary and appropriate corporate or governmental action and a copy of the extract of the charter documents and board resolution/ power of attorney in favor of the person executing this Agreement for the delegation of power and authority to execute this Agreement on behalf of the Consortium Member is annexed to this Agreement, and will not, to the best of its knowledge:

- a. require any consent or approval not already obtained;
- b. violate any Applicable Law presently in effect and having
- c. applicability to it;
- d. violate the memorandum and articles of association, by-laws or other applicable organizational documents thereof;
- e. violate any clearance, permit, concession, grant, license or other governmental authorization, approval, judgment, order or decree or any mortgage agreement, indenture or any other instrument to which such Party is a party or by which such Party or any of its properties or assets are bound or that is otherwise applicable to such Party; or
- f. create or impose any liens, mortgages, pledges, claims, security interests, charges or encumbrances or obligations to create a lien, charge, pledge, security interest, encumbrances or mortgage in or on the property of such Party, except for encumbrances that would not, individually or in the aggregate, have a material adverse effect on the financial condition or

prospects or business of such Party so as to prevent such Party from fulfilling its obligations under this Agreement;

- g. this Agreement is the legal and binding obligation of such Party, enforceable in accordance with its terms against it; and
- h. there is no litigation pending or, to the best of such Party's knowledge, threatened to which it or any of its Associates is a party that presently affects or which would have a material adverse effect on the financial condition or prospects or business of such Party in the fulfillment of its obligations under this Agreement.

## 6. Termination

This Agreement shall be effective from the date hereof and shall continue in full force and effect until the Financial Close of the Project is achieved under and in accordance with the Concession Agreement, in case the Project is awarded to the Consortium. However, in case the Consortium is either not prequalified for the Project or does not get selected for award of the Project, the Agreement will stand terminated in case the Applicant is not pre-qualified or upon return of the Bid Security by the Authority to the Bidder, as the case may be.

## 7. Miscellaneous

- a. This Joint Consortium Agreement shall be governed by laws of India.
- b. The Parties acknowledge and accept that this Agreement shall not be amended by the Parties without the prior written consent of the Authority.
- c. Further it is hereby declared that the Roles, Responsibilities and other relevant details of the Consortium members are:

Sr. No.	Member	Role	Responsibilities	Description of nature of service	Head and Branch offices (Provide mailing addresses, phone, fax and email)
1					
2					

IN WITNESS WHEREOF THE PARTIES ABOVE NAMED HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN.

SIGNED, SEALED  
AND DELIVERED

SIGNED, SEALED  
AND DELIVERED

For and on behalf of

---

LEAD MEMBER by:	SECOND PART
(Signature)	(Signature)
(Name)	(Name)
(Designation)	(Designation)
(Address)	(Address)

In the presence of:

**Notes:**

The mode of the execution of the Joint Bidding Agreement should be in accordance with the procedure, if any, laid down by the Applicable Law and the charter documents of the executant(s) and when it is so required, the same should be under common seal affixed in accordance with the required procedure. Each Joint Bidding Agreement should attach a copy of the extract of the charter documents and documents such as resolution / power of attorney in favor of the person executing this Agreement for the delegation of power and authority to execute this Agreement on behalf of the Consortium Member. For a Joint Bidding Agreement executed and issued overseas, the document shall be legalized by the Indian Embassy and notarized in the jurisdiction where the Power of Attorney has been executed.

## Annexure 23 Format for Power of Attorney for Lead Member

(To be submitted by the Consortium on Non – Judicial stamp paper of INR 100/- duly attested by Notary Public)

**Whereas** the Maharashtra Pollution Control Board, (“MPCB”), Government of Maharashtra, has invited applications from Bidders for ‘Selection of an Agency for ..... for MPCB(“Project”).

**Whereas** .....(Lead Member).....and.....(Member -1) (collectively the “Consortium”) being Members of the Consortium are interested in bidding for the Project and implementing the Project in accordance with the terms and conditions of the Request for Proposal (“RFP”) document and other connected documents in respect of the Project; and,

**Whereas** it is necessary under the RFP document for the Members of the Consortium to designate one of them as the Lead member with all necessary power and authority to do for and on behalf of the Consortium, all acts, deeds and things as may be necessary in connection with the Consortium’s bid for the Project and its execution.

NOW THEREFORE KNOW ALL MEN BY THESE PRESENTS

We, .....(Lead Member)..... having our registered office at ....., and M/s. ....(Member -1)....., having our registered office at (hereinafter collectively referred to as the “Principals”) do hereby irrevocably designate, nominate, constitute, appoint and authorize M/s ....., having its registered office at ....., being one of the Members of the Consortium, as the Lead member and true and lawful attorney of the Consortium (hereinafter referred to as the “Attorney”) and hereby irrevocably authorize the Attorney to conduct all business for and on behalf of the Consortium and any one of us during the bidding process and, in the event the Consortium is awarded the Contract, during the execution of the Project, and in this regard, to do on our behalf and on behalf of the Consortium, all or any of such acts, deeds or things as are necessary or required or incidental to the submission of its Proposal for the Project, including but not limited to signing and submission of all applications, Proposal and other documents and writings, accept the Work Order, participate in Bidders’ and other conferences, respond to queries, submit information/ documents, sign and execute contracts and undertakings consequent to acceptance of the Proposal of the Consortium and generally to represent the Consortium in all its dealings with MPCB, and/ or any other Government agency or any person, in all matters in connection with or relating to or arising out of the Consortium’s Proposal for the Project and/ or upon award thereof till the Agreement is entered into with MPCB.

AND hereby agree to ratify and confirm and do hereby ratify and confirm all acts, deeds and things done or caused to be done by our said Attorney pursuant to and in exercise of the powers

conferred by this Power of Attorney and that all acts, deeds and things done by our aforesaid Attorney shall and shall always be deemed to have been done by us/Consortium and shall be binding till the Agreement period on all Members individually and collectively.

IN WITNESS WHEREOF WE THE PRINCIPALS ABOVE NAMED HAVE EXECUTED THIS POWER OF ATTORNEY ON THIS ..... DAY OF ..... 2024

For .....  
(Signature)

.....  
(Name & Title)

For .....  
(Signature)

.....  
(Name & Title)

**Witnesses:**

- 1.
  - 2.
- .....

Dated this the \_\_\_ day of \_\_\_ 2024  
(Executants)

**Note:**

- *The mode of execution of the Power of Attorney should be in accordance with the procedure, if any, laid down by the applicable law and the charter documents of the executants (s) and the same should be under common seal affixed in accordance with the required procedure.*
- *Also, wherever required, the Bidder should submit for verification the extract of the charter documents and documents such as a board or shareholders' resolution/ power of attorney in favor of the person executing this Power of Attorney for the delegation of power hereunder on behalf of the Bidder*

### Annexure 24 Locations for Installations

S. No.	Name of River	Address	Priority
<b>Mithi (POWAI TO DHARAVI)</b>			
1	2168	Mithi river near Road bridge, Village. Mahim, Taluka. Bandra, District. Mumbai.	I (BOD Max. above 30mg/l)
<b>Mutha (SHIVAJI NAGAR TO KHADAKWASLA DAM)</b>			
2	2191	Mutha river at Sangam bridge near Ganapathyghat, Village. Shivaji Nagar, Taluka. Pune, District. Pune.	II (BOD Max. 20-30 mg/l)
<b>Pawna (DAPODI TO RAVET)</b>			
3	2196	Pawana river at Sangavigaon, Village. Sangavigaon, Taluka. Haweli, District. Pune.	I (BOD Max. above 30mg/l)
<b>Bhima (VITHALWADI TO TAKLI)</b>			
4	28	Bhima river at Takli near Karnataka border, Village. Takali, Taluka. South Solapur, District. Solapur.	II (BOD Max. 20-30 mg/l)
<b>Mula (BOPODI TO AUNDH GAON)</b>			
5	2193	Mula river at Aundh bridge, Village. Aundhgaon, Taluka. Haweli, District. Pune.	II (BOD Max. 20-30 mg/l)
<b>Panchaganga (SHIROL TO KOLHAPUR)</b>			
6	1311	Panchaganga river at Ichalkaranji near MIDC intake well. Village. Shiradhwad (Ichalkaranji ghat), Taluka. Hatkanangale, District. Kolhapur.	IV (BOD Max. 6-10 mg/l)
<b>Godavari (SOMESHWAR TEMPLE TO RAHED)</b>			
7	1209	Godavari river at Raheer, Village. Raheer, Taluka. Nayagaon, District. Nanded.	III (BOD Max. 10-20 mg/l)
<b>Kundalika (SALAV TO ROHA)</b>			
8	1152	Kundalika river at Roha bridge, Village. Roha, Taluka. Roha, District. Raigad.	III (BOD Max. 10-20 mg/l)
<b>Nira (SANGAVI TO SHINDEWADI)</b>			



S. No.	Name of River	Address	Priority
9	2195	Nira river at D/s of Jubilant Organosis, Village. Nimbut, Taluka. Baramati, District. Pune.	III (BOD Max. 10-20 mg/l)
<b>Indrayani (MOSHIGAON TO ALANDIGAON)</b>			
10	2197	Indrayani river at D/s of Alandigaon, Village. Alandigaon, Taluka. Haweli, District. Pune.	IV (BOD Max. 6-10 mg/l)